Rivera, Jose

From: Grossman, Lenny
Sent: Tuesday, July 14, 2015 12:07 PM
To: Rivera, Jose
Cc: Voo, Leonard
Subject: AES POA Dust Control Plan

Jose,

Here are our comments on the AES POA Dust Control Plan, and my response to Len Voo's questions (which provide background to our comments). Let's discuss after you meet with AES today.

Len

Comments to AES POA Dust Control Plan

- Revise plan to include the installation of wind barriers.
- Consider the inclusion of mechanical dust control measures, such as vacuum collection systems, in CCR transfer areas.
- Revise plan to comport with 40 C.F.R. 257.80, including:

  1) Emplacement of conditioned CCR, per 257.80(b)(2)
  2) Procedures for logging citizen complaints, per 257.80(b)(3)
  3) Annual CCR fugitive dust control report, per 257.80(c)
  4) Recordkeeping, per 257.80(d)

My response to Len Voo's questions:

Note that the 258.80 requirements apply to "existing CCR landfills," and that if AES were to install (as it apparently told Jose it will) a liner (or other means to preclude subsurface contaminant release) and wind barriers or a containment structure (which Jose has not mentioned), the Agremax pile would (as I confirmed with ORCR) no longer be a "CCR pile" and thus would not be "existing landfill" regulated under the final rule, i.e., 40 C.F.R. 258.80 (see http://www.gpo.gov/fdsys/pkg/FR-2015-04-17/pdf/2015-00257.pdf page 21,355).

Section 3.2 – What objective criteria, if any, can be used to determine when operations should be stopped or limited? EPA dropped its proposed numerical emission standard in response to comments on the proposed rule, and confirmed in the final rule that visible emissions were an appropriate performance standard for the implementation of dust control measures (see pages 21,386 – 7).

Section 6.0 – What objective criteria, if any, can be used to determine if primary and contingency controls are effective or not? A dust control plan is required per 258.80, including annual reports detailing corrective measures taken (see page 21,480)

Section 6 – Wet suppression methods. Do these include things other than just plain water? Given the drought, can they use other less water intensive methods (e.g., tarps, windbreaks, posi-shell, etc.)? 258/80 requires that "conditioned

CCR" (i.e., CCR wetted to prevent wind dispersal) be placed in CCR landfills, and EPA, in response to comments, will allow chemical suppressants to be applied in lieu of water (see page 21,388).

Section 8 – Are there automated next gen monitors that can be used to detect dust emissions? I'll defer to CAA staff on this, and also note that the final rule agreed with commenters that the appropriate numerical standard in the State Implementation Plan permits and/or NAAQS PM2.5/PM10 standards (if I understand this correctly) are applicable to CCR (see pages 21,386 – 7).

AES
Puerto Rico
PO Box 1890
Guayama, PR 00785
tel 787 866 8117
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www.aespuertorico.com

AES-011

June 8, 2015

Nancy Rodriguez, P.E.
Chief, Multimedia Permits and Compliance Branch
United States Environmental Protection Agency
Caribbean Environmental Protection Division
City View Plaza II, Suite 700
Guaynabo, Puerto Rico 00785

Re: AES Coal-Fired Power Plant and Marine Cargo Handling Dock Facility
Administrative Order on Consent
Docket Number CWA-02-2015-3102

Dear Mrs. Rodriguez:

On March 18, 2015 AES Puerto Rico LP ("AES-PR") and the United States Environmental Protection Agency ("EPA") entered into the above referenced Administrative Order on Consent ("AOC") , under which AES-PR is obligated to comply with certain requirements (AOC Section VII, Ordered Provisions). All capitalized terms in this letter shall have the meaning as defined in the AOC. This communication is in response to the requirements AOC Section VII ¶ 72 - Plan of Action (POA), and 73- POA Certification.

AES-PR hereby submits the duly certified POA as an attachment to this letter in advance of the required deadline. We respectfully request EPA to advise AES-PR promptly should any concerns with this submission arise. Should AES-PR not receive timely comments from EPA it will be assumed that AES-PR has satisfied the requirements of AOC Section VII ¶ 72 and 73 in full and therefore no further action should be required regarding this matter.

If you have questions or need further information, please contact me.

Cordially,

Manuel Mata
President, AES Puerto Rico
Attachments

Cc: Mr. Ramiro Rivera, AES-PR
Mr. Hector Avila, AES-PR
Mr. Pedro Labayen, AES-PR
Director, Water Quality Area, PR-EQB

Administrative Order on Consent
AES Puerto Rico Coal Fired Power Plant
Docket Number CWA-02-2015-3102
NPDES Tracking Number PRU020663

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Manuel Mata
President AES Puerto Rico

June 8, 2015
Date

Winston R. Esteves, P.E.
Environmental Consultant

REPORT

Plan of Action

AES Coal-Fired Power Plant and Marine Cargo Handling Dock Facility

Administrative Order on Consent

Docket Number CWA-02-2015-3102

For:

AES Puerto Rico LP
Guayama, Puerto Rico

By:

Winston R. Esteves, P.E.

June 1, 2015

Table of Contents

Appendixes

Purpose

The main purpose of this Plan of Action (POA) is to describe the conditions requiring a review and revision of the selection, design, installation implementation of storm water control measures at the AES Puerto Rico LP (AES-PR), the actions taken to date, and any additional actions / implementation schedule required to comply with the applicable benchmark monitoring parameters of the 2008 Multi Sector General Permit.

Background

AES-PR is a coal-fired power plant that generates and sells electricity to the Puerto Rico Electric Power Authority and produces a manufactured aggregate known as Agremax™. AES-PR also owns and operates ancillary marine dock facilities that are not contiguous to its main power generation plant.

Under the U S Environmental Protection Agency's (EPA) 2008 Multi Sector General Permit (MSGP) the AES-PR storm water discharges are covered under Sectors O - Steam Electric Generating Facilities (SIC 4911-Electric Services) and Q – Water Transportation (SIC 4491-Marine Cargo Handling).

The following quarterly benchmark monitoring requirements of the 2008 MSGP apply to the AES-PR storm water discharges:

Sector- Parameter	Benchmark Monitoring Concentration
O- Total Iron	1.0 mg/L
Q-Total Aluminum	0.75 mg/L
Q- Total Iron	1.0 mg/L
Q- Total Lead	0.262*
Q- Total Zinc	0.260*

* Hardness dependant – receiving water hardness is > 250 mg/L

Presently, there are three storm water outfalls at AES-PR; outfall point 001 located at the marine dock area, outfall point 002 at the southeast quadrant of the main site and outfall point 003 north of the coal pile.

Review of Control Measures

Routine facility inspections, quarterly visual assessments and comprehensive site inspections are performed to determine if the controls implemented are being properly operated and maintained. However, as discussed below, the primary method to determine the effectiveness of the numerous control measures (meant to operate in series) is through the evaluation of the end-of-pipe quarterly benchmark monitoring results according to Section 3.2 of the 2008 MSGP.

Benchmark Monitoring Results

The 2012- 1Q 2015 benchmark monitoring results for the three storm water outfalls are summarized in the tables and graphs included in Appendix 1. Please note that the results include the 2012-2013 period before AES-PR constructed and implemented major structural and non- control measures. As such, 2014 is the first year of operations with the new control measures that can be used as a baseline to determine the effectiveness of the new controls and if modifications are necessary to meet the effluent limits of the 2008 MSGP.

Point 001 Discharge- the monitoring results for this discharge indicate that aluminum and iron remained above benchmark limits until the second quarter of 2014 when the use of a vacuum truck for cleaning the dock area after each transfer operation was initiated.

Point 002 Discharge- the monitoring results for this discharge indicate that aluminum and iron remained above benchmark limits until the second quarter of 2014 when the frequency of use of a vacuum truck for cleaning the pavement in the vicinity of the discharge point was increased from monthly to weekly. Although the sum of the 2014 quarterly sample results (3) for the two parameters is less than 4 times the benchmark level, aluminum was detected just above the benchmark limit during the first quarter of 2015.

Point 003 Discharge- the monitoring results for this discharge indicate that aluminum and iron remained above benchmark limits until the fourth quarter of 2013. Although the sum of the 2014 quarterly sample results (2) for the two parameters is less than 4 times the benchmark level, aluminum was detected just above the benchmark limit during the first quarter of 2015.

Actions Taken

After a review to the benchmark monitoring results at the end of the first year of implementation of the new control measures 2014 AES-PR decided to increase the frequency of use of the vacuum truck in the vicinity of discharge point 002 and initiate its use to clean the dock area. This resulted in sustained compliance at the dock area.

Additional Actions

The small increase in aluminum concentration detected at discharge points 002 and 003 in the first quarter of 2015 suggested to the AES Pollution Prevention Team that more efficient sweeping of the Agremax and coal dust fallout deposited over the paved roads in the vicinity of these discharge points would result in a decreased discharge of this pollutant.

After an evaluation of possible alternatives, in April 2015 AES-PR decided to purchase a more efficient sweeper to clean these areas while continuing

with the quarterly benchmark monitoring and evaluation activities. Copy of the purchase order for the sweeper is included in this report as Appendix 2. Together with the Dust Control Plan required by EPA, the effective implementation of these additional modifications should be adequate to meet the benchmark discharge limits consistently.

Dust Control Plan

As required by EPA, AES-PR has developed and will implement a Dust Control Plan for the minimization and control of dust from the coal combustion residuals and Agremax handling activities at the site. Copy of this Dust Control Plan, developed as a Standard Operating Procedure (SOP) is included in this report as Appendix 3.

Implementation Schedule

The ordered sweeper and the Dust Control SOP are scheduled to be operational / implemented at AES-PR by August 31, 2015.

Signature

Winston R. Esteves
PE, CPESC, CISEC, CESWI

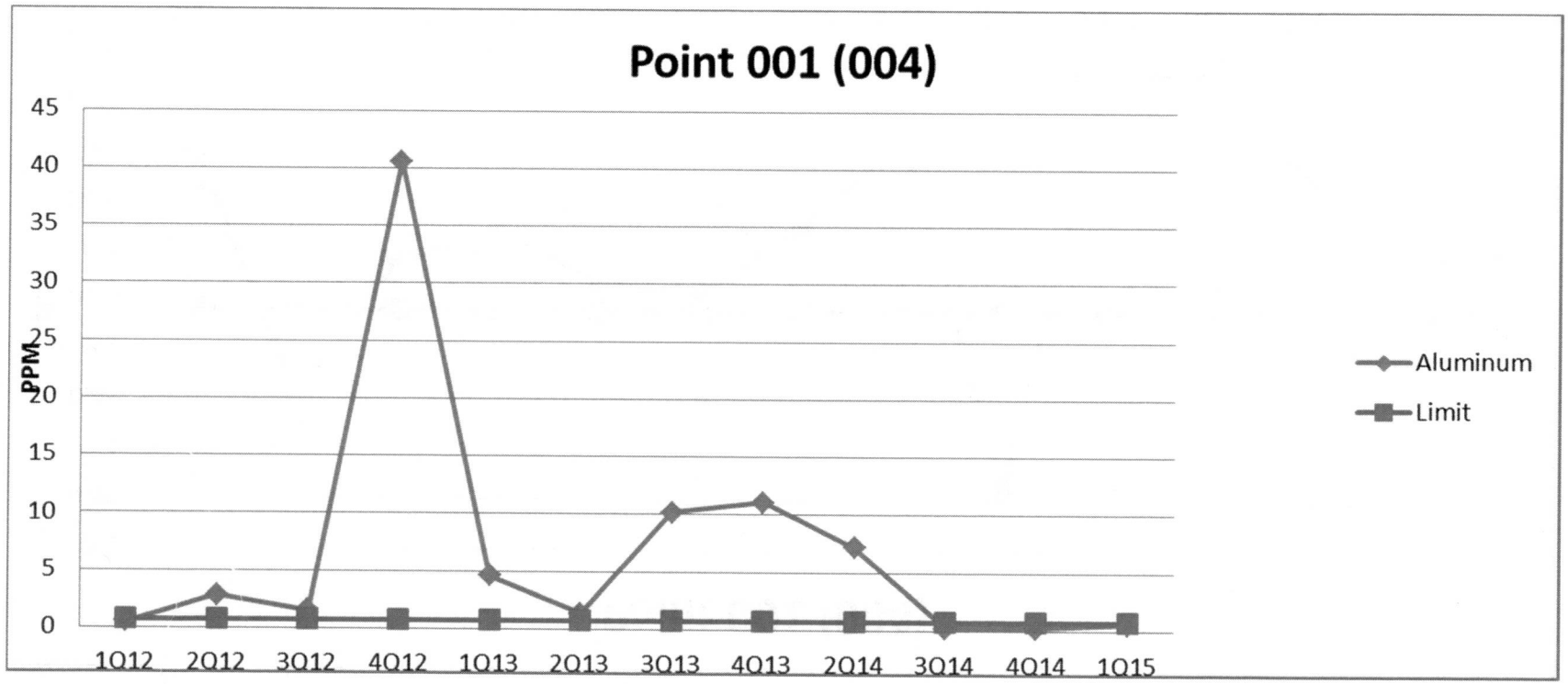
Qualifications

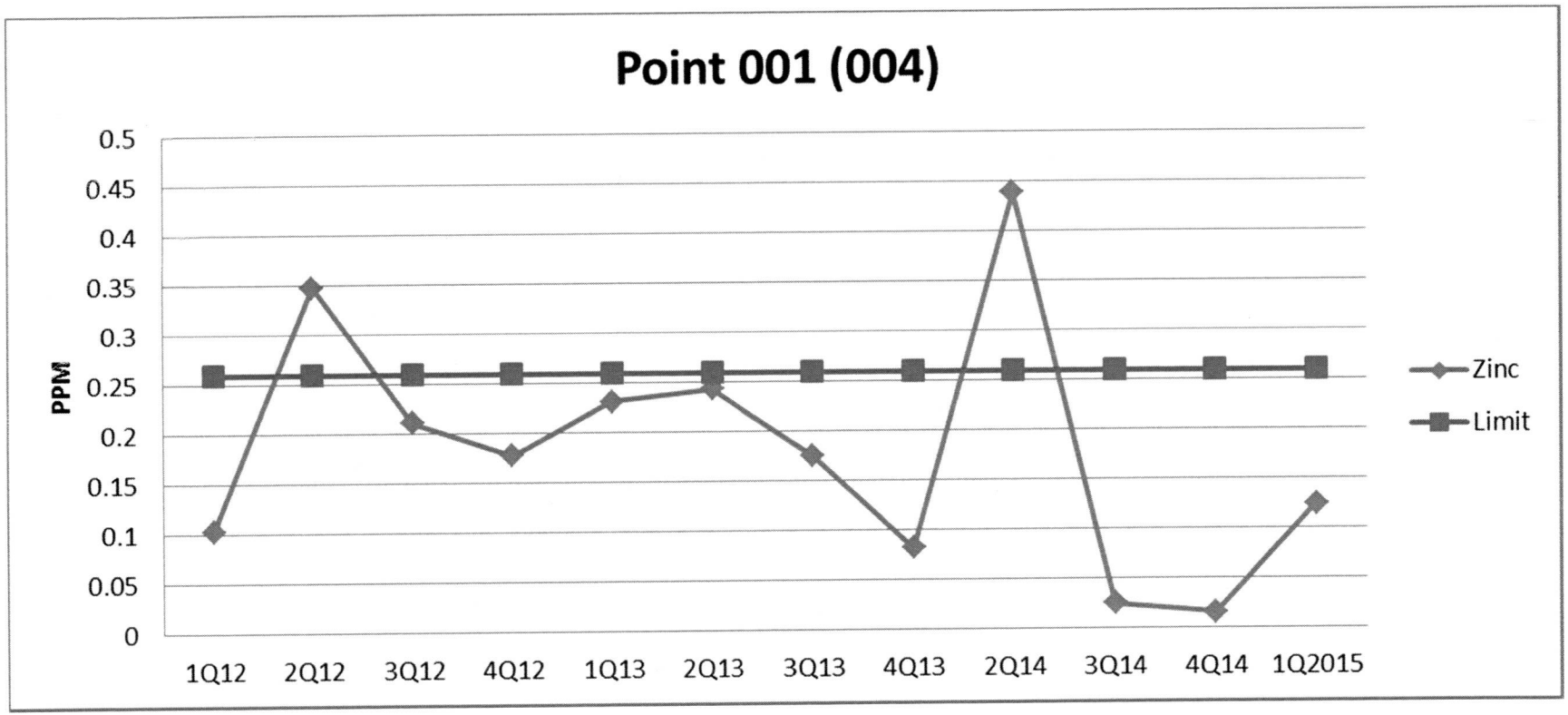
Winston R. Esteves prepared this POA report. He is a Licensed Professional Engineer in Puerto Rico with over 25 years of professional experience in storm water management and presently the only Certified Professional in Erosion and Sediment Control, Certified Erosion Sediment and Storm Water Inspector and Certified Inspector of Sediment and Erosion Control in Puerto Rico. A more detailed statement of his professional qualifications is included in Appendix 4.

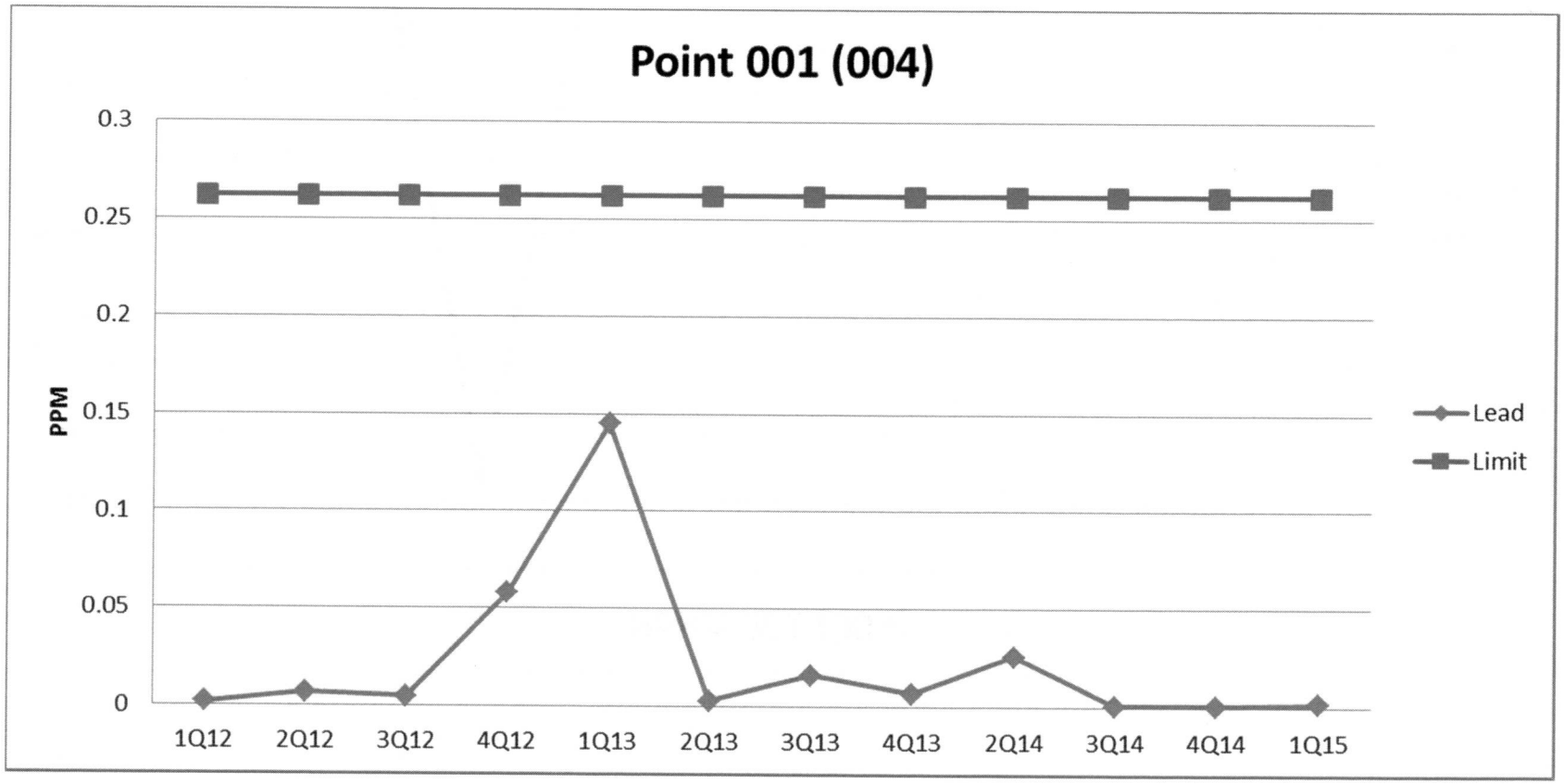
APPENDIX 1
Benchmark Monitoring Results

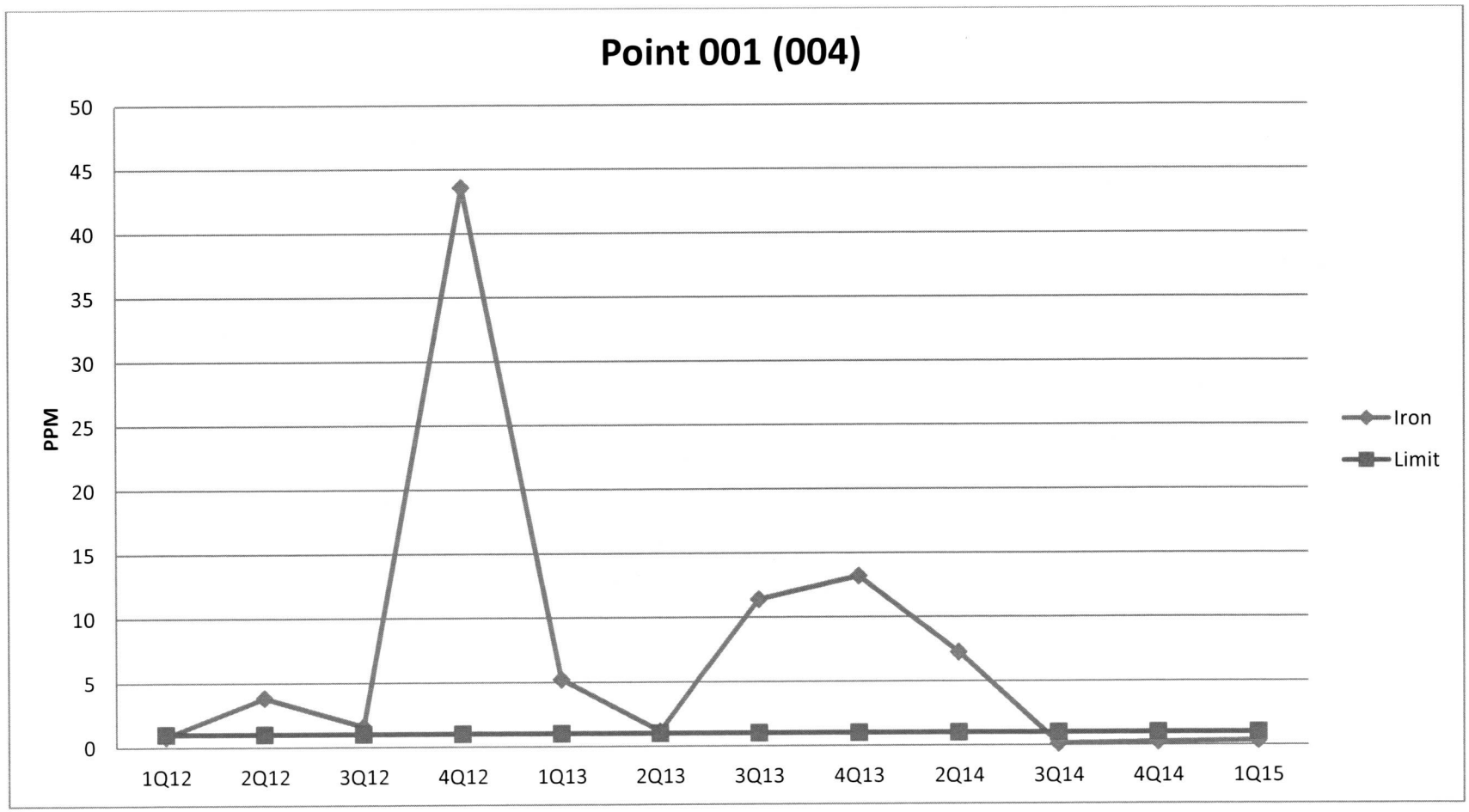
Sample Point 001

Quarter	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Aluminum	0.508	2.82	1.57	40.6	4.62	1.36	10.2	11.1	7.2	0.248	0.24	0.568	2.064
Limit	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Quarter	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Iron	0.818	3.83	1.6	43.6	5.23	1.17	11.4	13.2	7.25	0.134	0.244	0.344	1.993
Limit	1	1	1	1	1	1	1	1	1	1	1	1	1
Quarter	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Lead	0.002	0.007	0.005	0.058	0.145	0.003	0.016	0.007	0.026	0.001	0.001	0.002	0.0075
Limit	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262
Quarter	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q2015	Last 4 Quarter Averg
Zinc	0.103	0.348	0.211	0.178	0.231	0.243	0.175	0.082	0.439	0.025	0.016	0.124	0.151
Limit	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26


Point 001 (004)
PPM
45
40
35
30
25
20
15
10
5
0
1Q12
2Q12
3Q12
4Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Aluminum
Limit


Point 001 (004)
PPM
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1Q12
2Q12
3Q12
4Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q2015
Zinc
Limit


Point 001 (004)
PPM
0.3
0.25
0.2
0.15
0.1
0.05
0
1Q12
2Q12
3Q12
4Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Lead
Limit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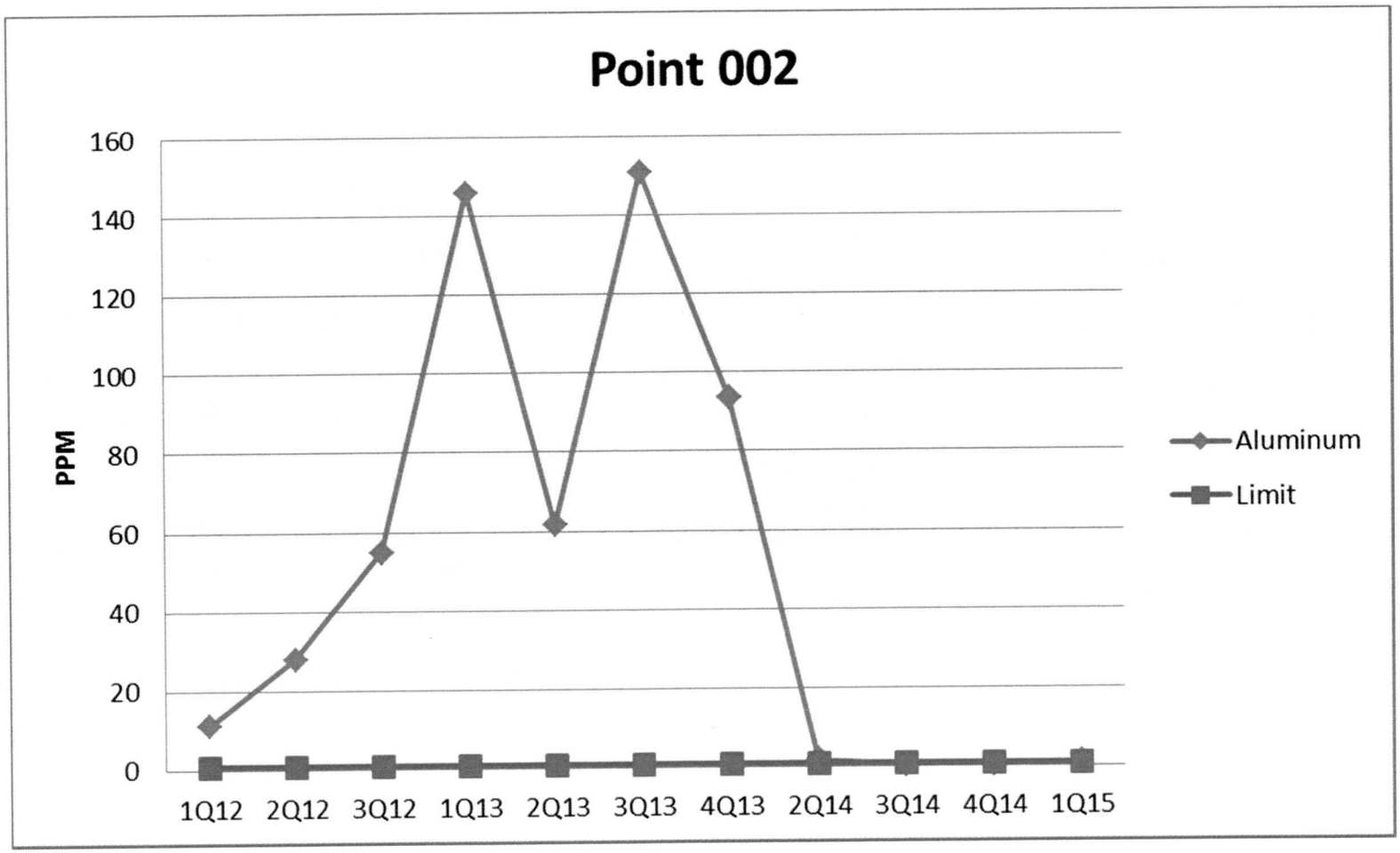
PPM
50
45
40
35
30
25
20
15
10
5
0
1Q12
2Q12
3Q12
4Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Iron
Limit

Sample Point 002

Quarter	1Q12	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Aluminum	11	28	54.8	146	61.6	151	93.6	1.63	0.313	0.364	0.947	0.8135
Limit	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Quarter	1Q12	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Iron	2.86	25.2	63.9	180	14.1	184	116	1.52	0.102	0.063	0.272	0.48925
Limit	1	1	1	1	1	1	1	1	1	1	1	1
Quarter	1Q12	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Lead	0.012	0.041	0.044	0.693	0.108	0.025	0.008	0.01	0.001	0.001	0.004	0.004
Limit	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262
Quarter	1Q12	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	4Q14	1Q15	Last 4 Quarter Averg
Zinc	0.089	0.135	0.302	0.588	0.328	0.675	0.272	0.014	0.016	0.026	0.006	0.0155
Limit	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26


Point 002
160
140
120
100
80
60
40
20
0
PPM
1Q12
2Q12
3Q12
1Q13
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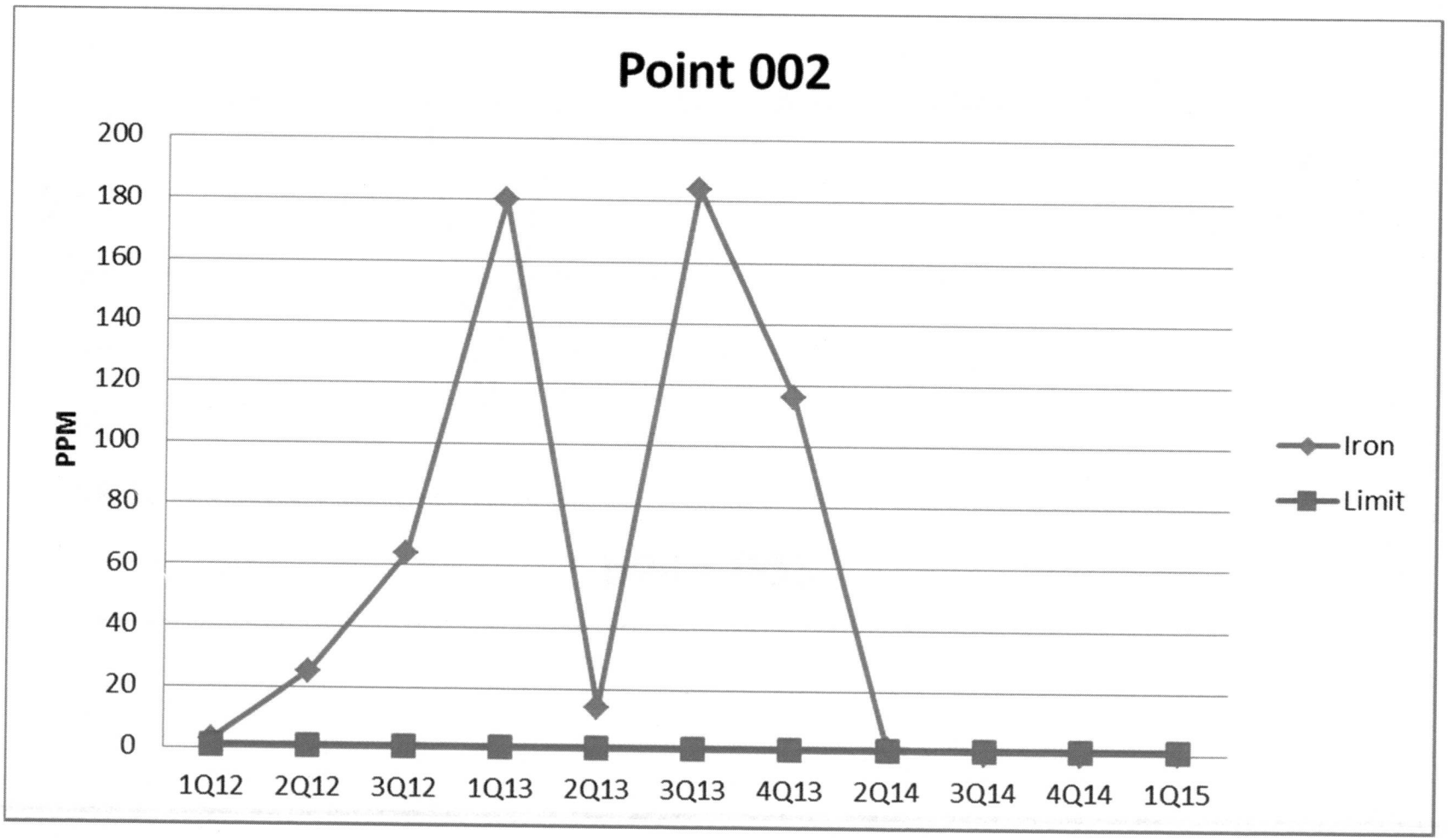
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Aluminum
Limit


Point 002
PPM
200
180
160
140
120
100
80
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40
20
0
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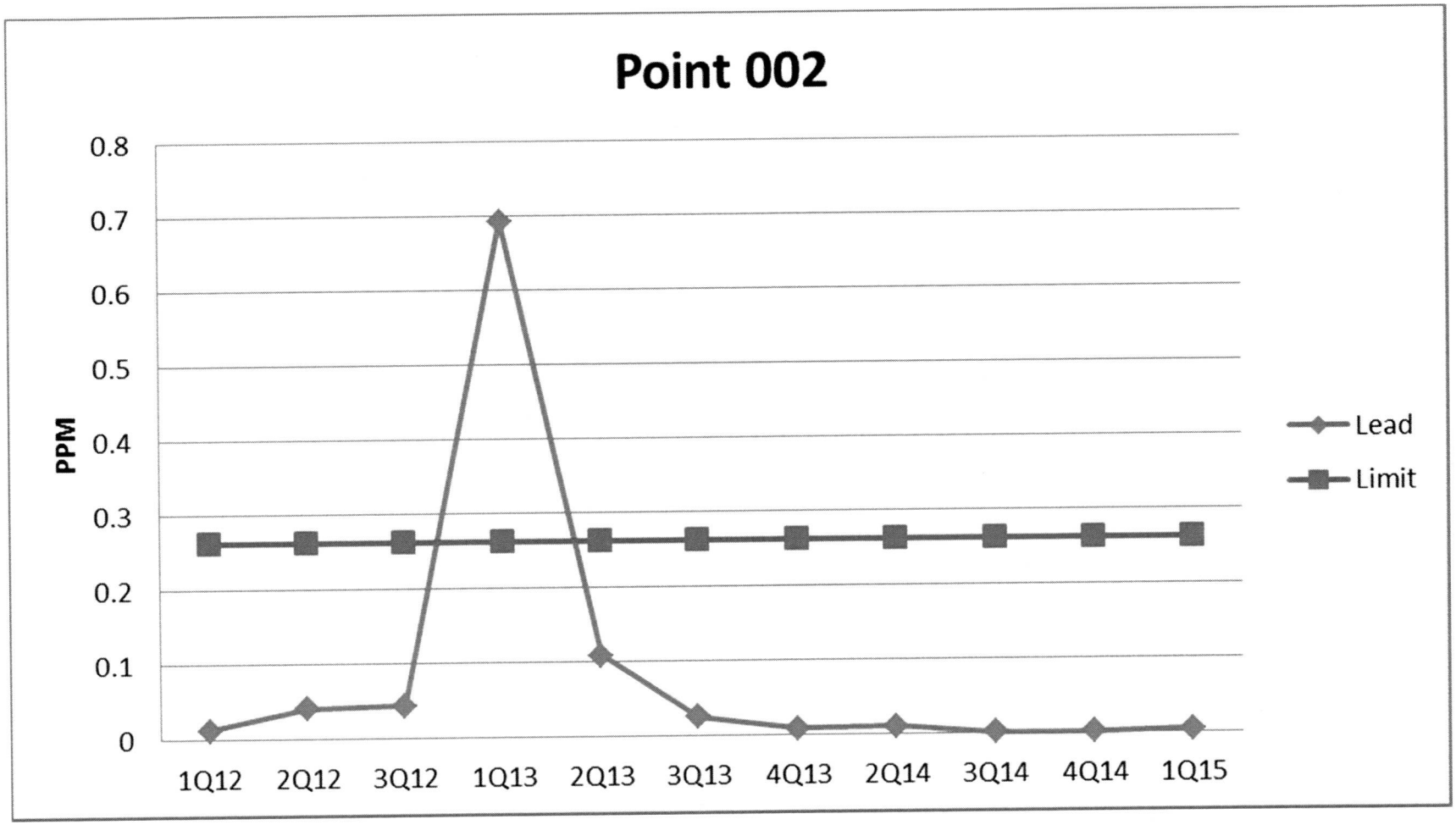
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Iron
Limit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0.8
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0.4
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0.2
0.1
0
1Q12
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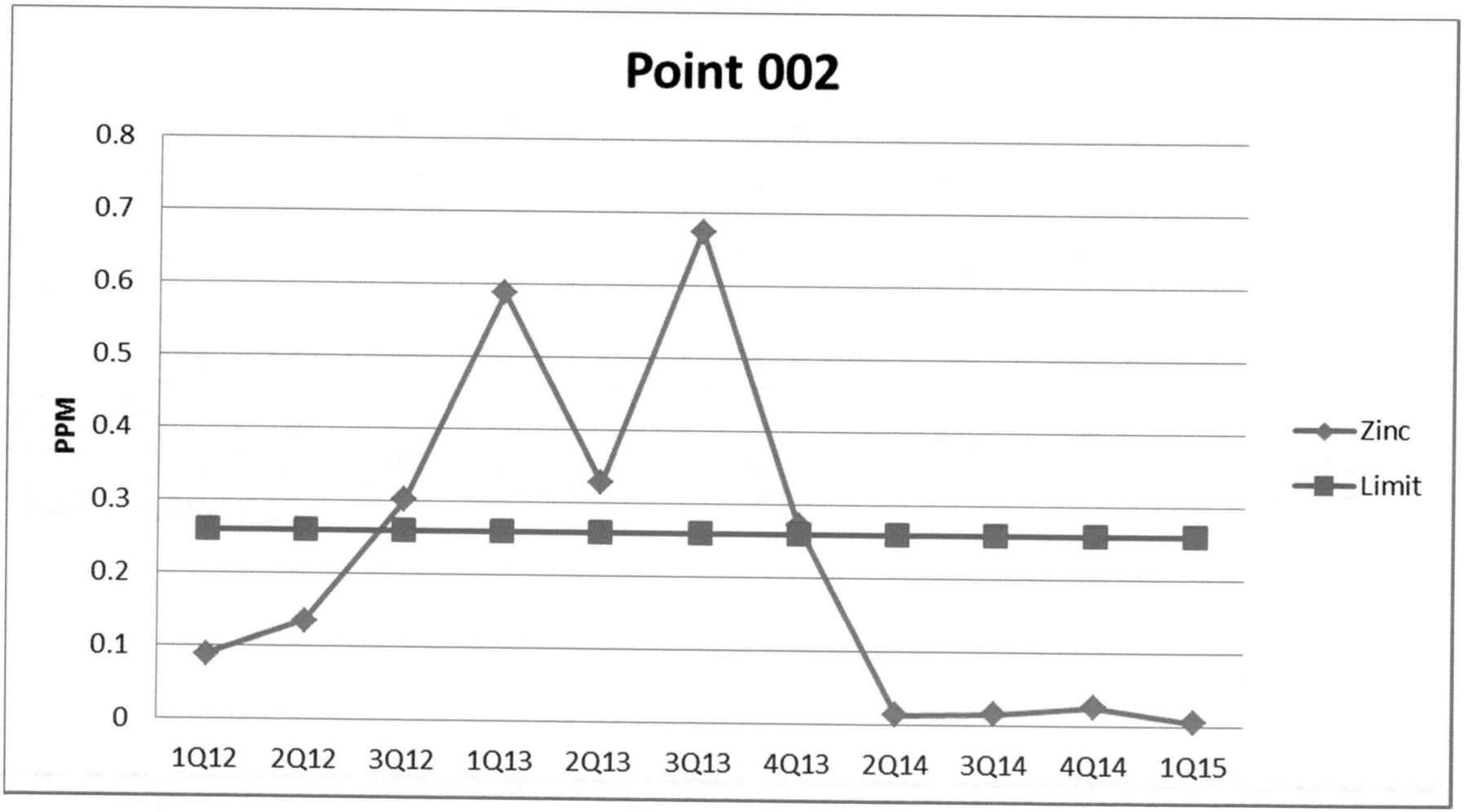
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Lead
Limit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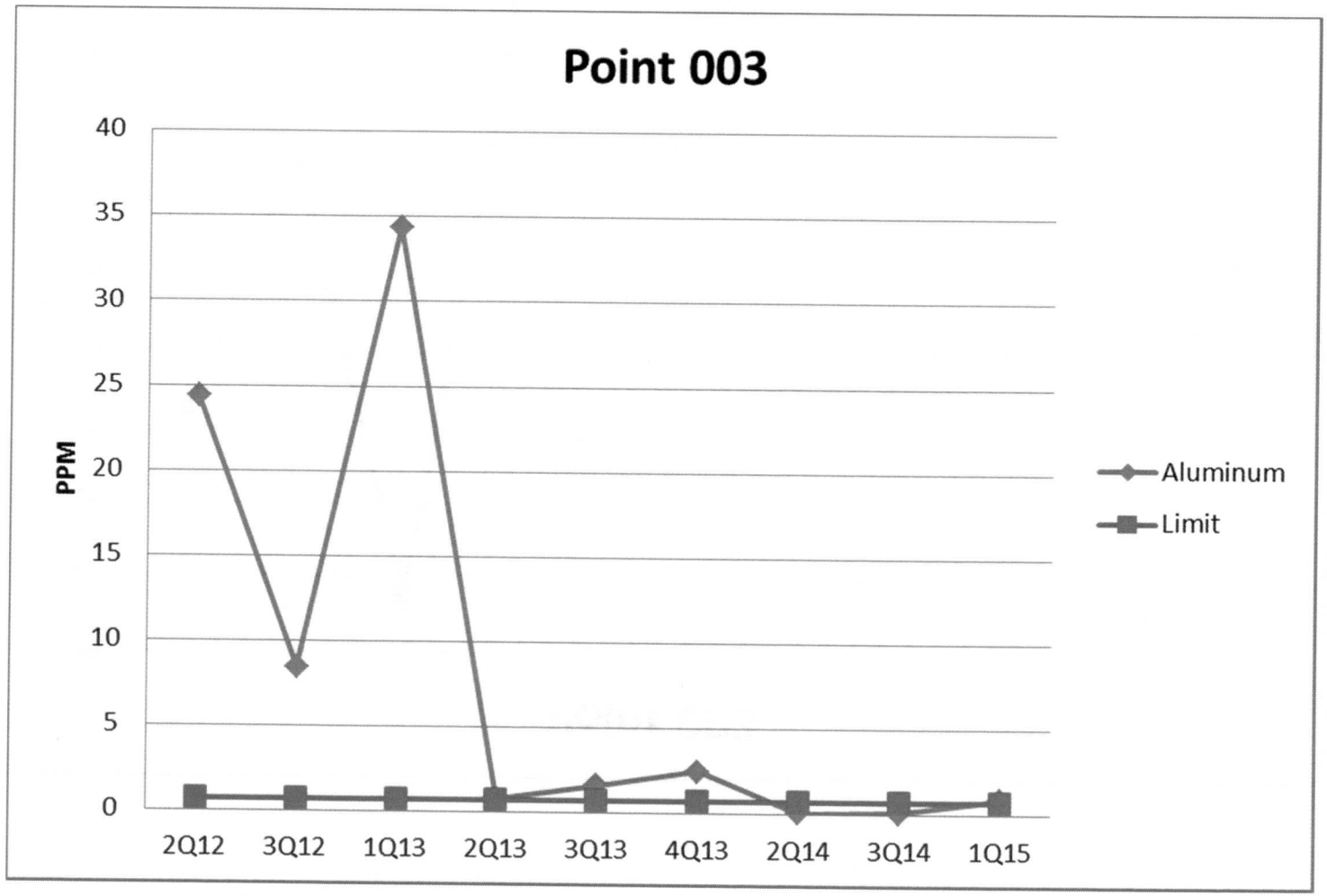
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1Q12
2Q12
3Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
4Q14
1Q15
Zinc
Limit

AES
Puerto Rico

Sample Point 003

Quarter	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	1Q15	Last 4 Quarter Averg
Aluminum	24.4	8.48	34.4	0.812	1.62	2.49	0.066	0.134	0.912	0.9005
Limit	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Quarter	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	1Q15	Last 4 Quarter Averg
Iron	29.1	11.8	41.4	0.75	1.48	2.41	0.023	0.119	0.396	0.737
Limit	1	1	1	1	1	1	1	1	1	1
Quarter	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	1Q15	Last 4 Quarter Averg
Lead	0.026	0.008	0.625	0.002	0.01	0.004	0.01	0.004	0.007	0.00625
Limit	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262
Quarter	2Q12	3Q12	1Q13	2Q13	3Q13	4Q13	2Q14	3Q14	1Q15	Last 4 Quarter Averg
Zinc	0.265	0.095	0.431	0.073	0.021	0.171	0.057	0.005	0.009	0.0605
Limit	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26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35
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25
20
15
10
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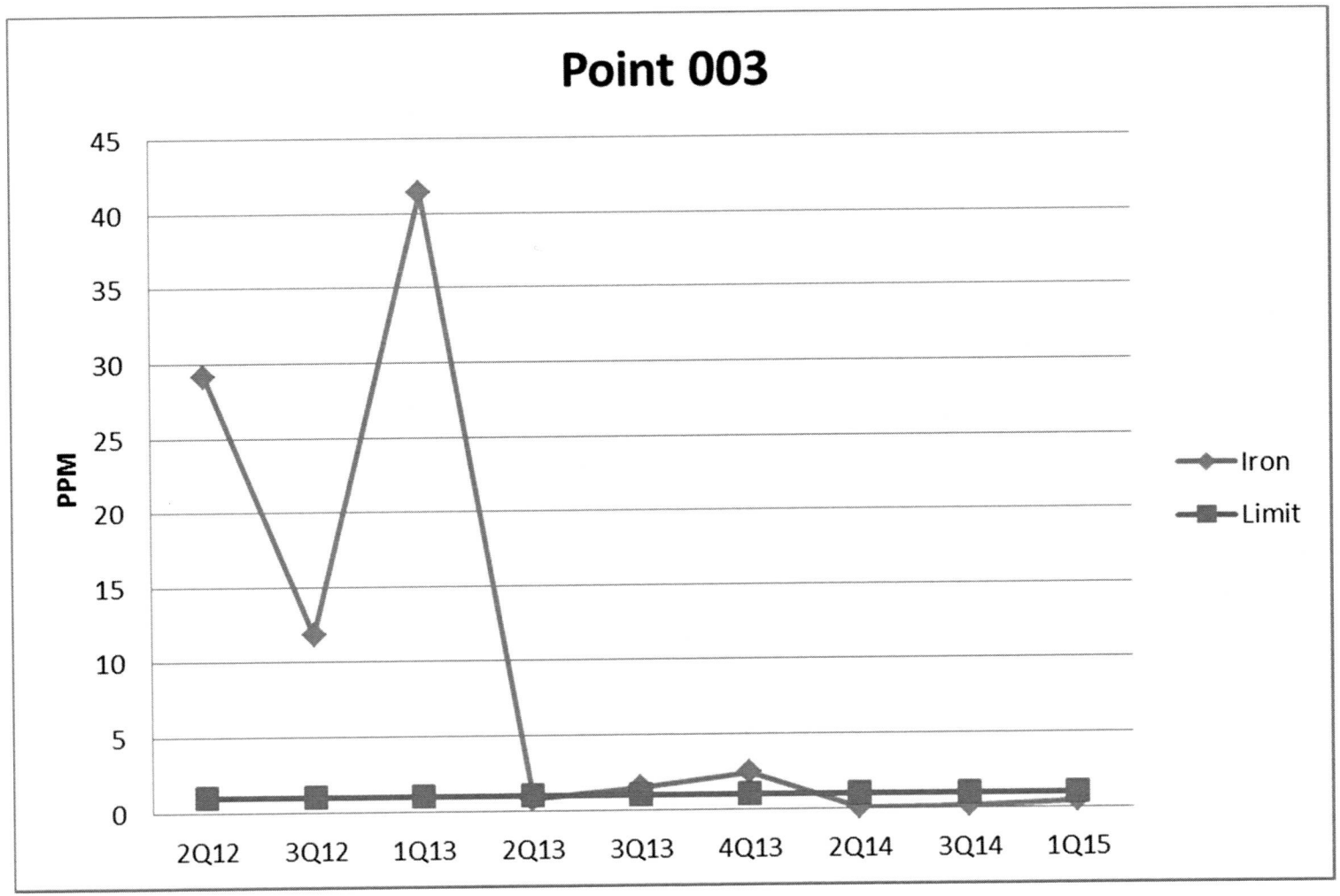
2Q14
3Q14
1Q15
Aluminum
Limit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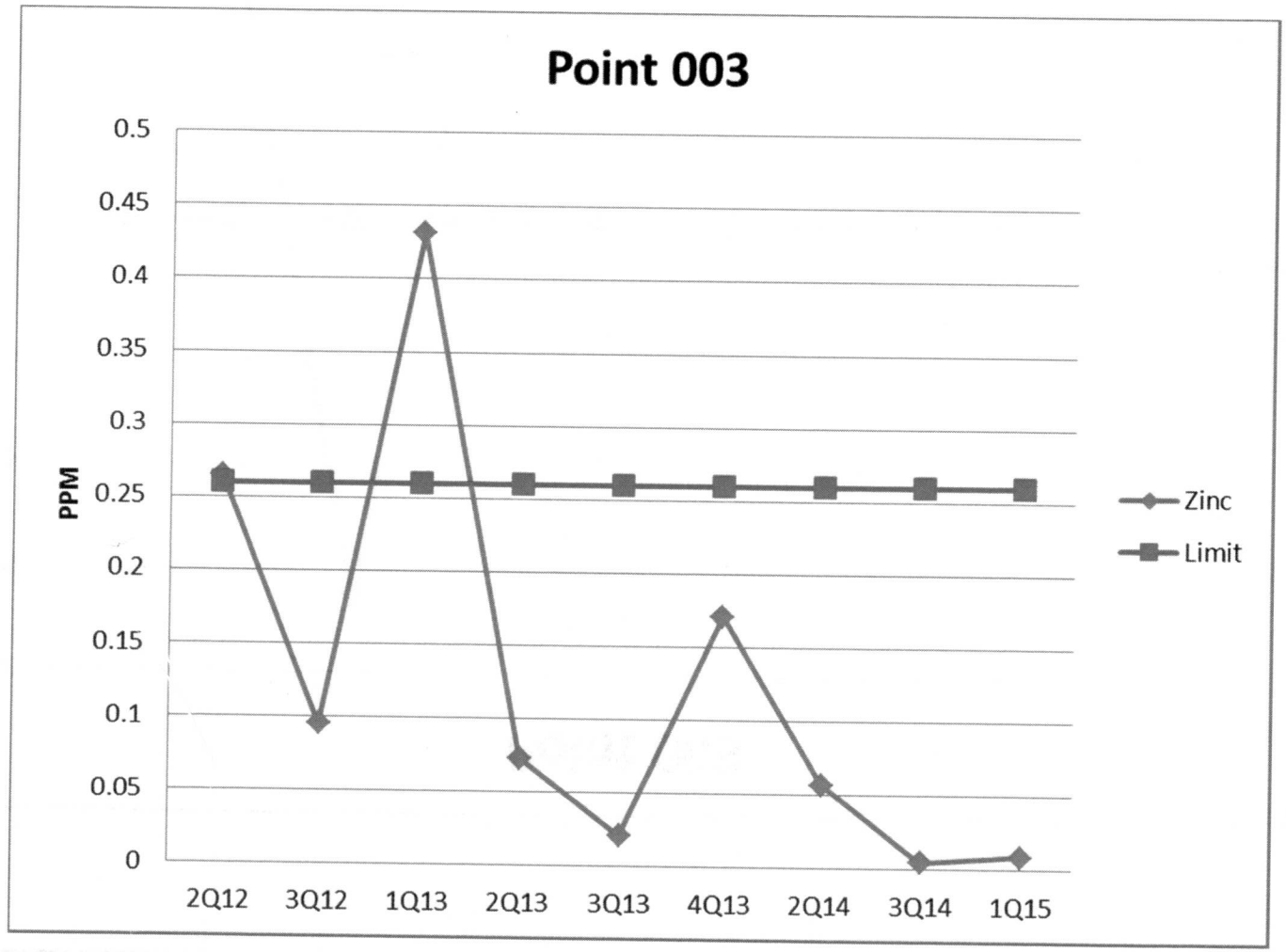
2Q14
3Q14
1Q15
Iron
Limit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2Q14
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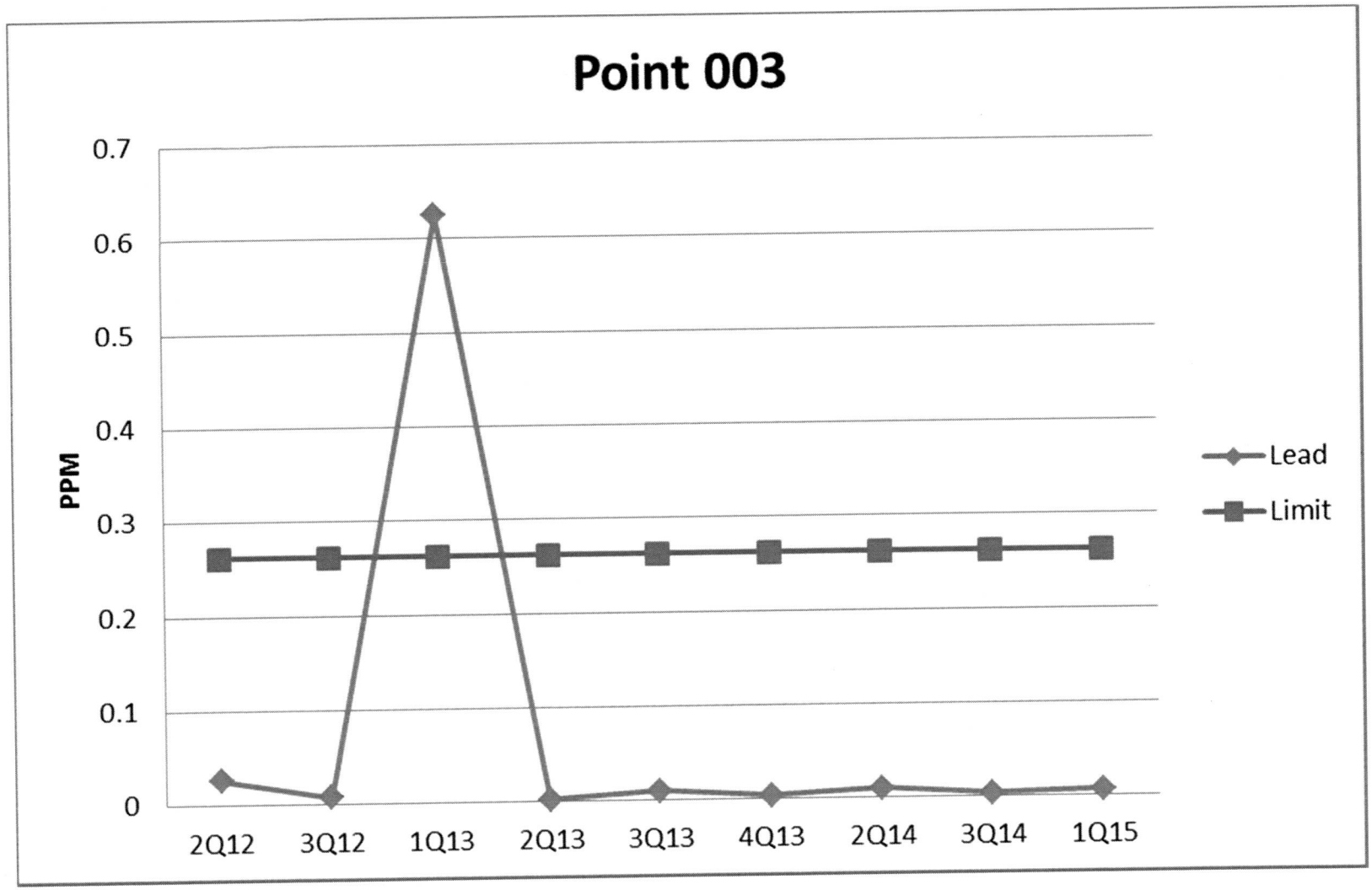
1Q15
Zinc
Limit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PPM
2Q12
3Q12
1Q13
2Q13
3Q13
4Q13
2Q14
3Q14
1Q15
Lead
Limit

APPENDIX 2
Sweeper Purchase Order

AES the power of being global	AES PUERTO RICO, LP PO Box 1890 Guayama,PR,00785,US	Purchase Order Number: 4500230739
	TEL: 787-866-2337	Order Date: 04-28-2015
	FAX: 787-864-2708	Page No. 1 of 7

Invoice Address	Delivery Address
AES PUERTO RICO, LP	AES PUERTO RICO, LP
PO Box 1890,Guayama PR 00785	Carretera # 3, Km 142.0, Bo. Puente Jobos
Effective immediately the invoices shall	
be sent to the address above or by email to:	
apinvoices.pr@aes.com	Guayama, PR,00784 ,US

PURCHASE ORDER

Vendor Name/ Address			
Name	: YANCEY BROS. CO.	AES Contact	: Melisa Cruz
Address	: 330 LEE INDUSTRIAL AV.	Telephone	: (787) 866-8117 EXT. 2265
City,State,Postal	: AUSTELL,GA,30168,US	EMAIL	: MELISA.CRUZ@AES.COM
Fax	: 770-819-5620	Payt Terms	: Payable immediately Due net-DD
Telephone	: 770-941-2300	IncoTerms	: CIF San Juan, PR

Please send invoices to apinvoices.pr@aes.com.
SERVICE DESCRIPTION AND USE: Sweeper DULEVO 200 Quattro CapEx
REQUEST BY: R. Rivera
PROPOSAL NUM: L. Castro on 04-21-15

Item No.	Material Number	Material Or Service Description	Vendor Material Number	Delivery Date	QTY	UOM	UNIT PRICE	Contract	Extended Price	Tax
00010		SWEEPER DULEVO 200 QUATTRO		06-23-2015	1.000	AU	65,250.00 USD		65,250.00 USD	

Item Notes:
Price include recommended spare parts as per list, 30% discount on parts has been applied.

	Sub Total	65,250.00 USD
	Tax	0.00 USD
	Total	65,250.00 USD

Melisa Cruz
Buyer

All documents referencing this purchase order must contain PO number to ensure PAYMENT

MATERIAL PURCHASE ORDER GENERAL TERMS AND CONDITIONS

1. **GENERAL.** These General Terms and Conditions ("Terms and Conditions") are hereby incorporated in and form a part of the Purchase Order to which they are attached (collectively referred to herein as the "Agreement"). For the purpose of this Agreement, "Buyer" shall be the the entity acquiring goods or materials pursuant to the Agreement and the term "Seller" shall refer to any party which, by means of this order, contracts with Buyer to provide goods or materials. The Purchase Order, including these General Terms and Conditions, constitutes the final, binding and entire agreement between Buyer and Seller. Acceptance of this Agreement may only be on the terms stated herein,except as otherwise specifically authorized in writing by Buyer. Except as provided herein, it is a condition of this Agreement that any unauthorized modification by Seller of the Terms and Conditions herein contained shall have no force or effect and Seller hereby agrees that any such provisions or modifications shall not constitute a part of this Agreement.

2. **ACCEPTANCE.** Seller's delivery of written acceptance or confirmation, or performance, shall constitute acceptance of this Agreement by Seller, and a contract shall be formed thereby. No additional or inconsistent provision in Seller's acceptance or confirmation shall be effective unless accepted in writing by authorized representative of the Buyer.

3. **NOTIFICATION.** Seller shall advise the Buyer's purchasing department at once of each shipping date of the Goods (as defined herein), whether delivered in whole or in part. Seller shall deliver all the goods or materials that are the subject of this Purchase Order (the "Goods") on the dates and according to the payment terms set forth in the Purchase Order.

4. **GUARANTEE.** With the exception of rented equipment, all Goods shall be new and of first class quality. Surplus, used, or refurbished Goods shall be permitted ONLY if it is so specified in the Purchase Order. If surplus or refurbished material is not specified in the Purchase Order, Seller guarantees that the Goods furnished under the Purchase Order: (a) are manufactured by Seller or another company specified in the item's description; (b) are manufactured of new, never used components; (c) are not in any way refurbished; and (d) were not acquired by Seller through the surplus market. Seller also guarantees that the Goods (including the use thereof) are free and clear of any patent infringement and agrees at its sole expense to indemnify, defend and hold Buyer harmless from any and all liability or loss of any nature or kind including without limitation all costs, expenses and damages (including attorney's and other expert's fees) arising from or relating to any claim, demand, action or suit arising from or relating to infringement of patents by the Goods. Buyer has the right to inspect the Goods covered by this Purchase Order at any time during its progress.

5. **WARRANTY.** The Seller warrants that, (a) the Goods are in good working order, in conformity with the specifications provided in the Purchase Order or other relevant documentation; (b) the Goods are merchantable and fit for the particular purpose specified by the Buyer or otherwise known to Seller; a period of one year from the date of receipt by the Buyer; (C) the manufacture and sale of the Goods to the Buyer is in compliance with all applicable international, federal, state, municipal, and local laws, statutes, ordinances, rules, regulations, and orders; and (d) Seller has a good and marketable title to the Goods, free and clear of all pledges, liens, charges, encumbrances, or claims of any kind. Seller warrants the Goods as set forth herein for a period of one (1) year or for the manufacturer's warranty, whichever is longer, from the date of receipt of Goods by the Buyer ("Warranty Period"). If during this Warranty Period, the Goods fail to conform in any manner to this warranty, Seller shall promptly repair, replace or otherwise make good, at its own expense to the satisfaction of Buyer, any such nonconforming Goods. If the Seller is required to replace the Goods, the Warranty Period shall be extended for an additional one (1) year from the date such Goods are repaired/replaced.

6. **CANCELLATION.** Buyer reserves the right to cancel this Purchase Order, in whole or in part, with reasonable notice at any time (a) prior to acceptance by Seller or (b) after acceptance by Seller, if Seller fails to deliver all or any part of the Goods in accordance with the terms of this Purchase Order. Acceptance of any part of the Goods shall not bind the Buyer to accept future nonconforming shipments.

7. **LOSS OR DAMAGE.** To the fullest extent permitted by law, Seller shall indemnify and , defend and hold harmless Buyer for any loss of or damage to all patterns, specifications, plans or the like, and equipment, delivered by the Buyer to Seller or manufactured by Seller or the Buyer for the purpose of this Purchase Order from the time of such delivery or manufacture until such patterns, specifications, plans or the like, and equipment, are returned or delivered to the Buyer.

8. **DESIGN.** Seller shall not in any manner cast, inscribe or placard with Seller's trademark or name any objects of the Buyer's design covered by this Purchase Order, including without limitation castings, machinery, apparatus, or equipment.

9. **SUBCONTRACTING.** Seller shall not assign, transfer, delegate or subcontract this Purchase Order wholly or in part to any other person or persons without the prior written consent of the Buyer.

10. **SHIPPING.** Bills of lading, express receipts, invoices, shipping lists, and other appropriate papers relating to this Purchase Order must be sent to the Buyer on the day shipment is made. All such papers shall bear the Buyer's Purchase Order number. All shipments must be made in name of Seller and all shipping and invoice requirements must be completed within every particular shipment.

11. **PACKAGING.** All packages, including without limitation, barrels, boxes, bags, crates, drums, kegs, reels, containers or other packages, must be tagged or marked with Seller's name and the Buyer's Purchase Order number. Packages and packing material will not be returned to Seller unless specifically set forth in this Purchase Order.

12. **INVOICING.** Net invoices and cash discount invoices received by the Buyer without supporting papers complete to the Buyer's satisfaction shall not be paid until complete as specified herein. The date of receipt by the Buyer of final and complete supporting papers shall in all cases govern dates of payment.

13. **PAYMENT TERMS.** Unless different payment terms are expressly stated in the Purchase Order, all proper and complete undisputed invoices submitted to the Buyer shall be paid in accordance with payment terms of a 2% discount if paid within 15 calendar days or net total within 45 calendar days (commonly known as 2/15, net 45) of receipt of invoice by the Buyer.

14. **CONFIDENTIALITY.** Except as expressly agreed by the Buyer in writing, Seller shall treat this Agreement as strictly confidential in every respect. Seller shall refrain from any publicity or advertising concerning the sale of any Goods covered hereby. Failure by Seller to maintain such confidentiality shall be considered a material breach, which shall permit the Buyer to terminate this Agreement immediately and without notice, and the Buyer shall incur no further liability with regard thereto. These obligations of confidentiality shall survive termination of the Agreement.

15. **GOVERNANCE.** This Agreement, and any disputes relating to, arising out of or connected with this Agreement, shall in all respects be governed by and construed in accordance with the laws of the State of New York, without giving effect to any choice of law rules thereof that may direct the application of the laws of another jurisdiction.

16. **AMENDMENTS.** . No additions, deletions or alterations shall be made to this Agreement unless the same shall be in writing and properly executed by authorized representatives of both parties.

17. **DELIVERY.** All Goods are F.O.B. Destination, where Seller must, at its own expense and risk, transport the Goods to the place of delivery unless expressly stated otherwise in the Purchase Order. Unless expressly stated otherwise in the Purchase Order, the place of delivery shall be the Buyer's facility. Seller shall tender delivery in the manner provided in this Purchase Order or as instructed by an authorized representative of the Buyer at the place of delivery. Seller shall prepay all transportation expenses. Title and risk of loss or damage of the Goods delivered in compliance with the Agreement shall pass to the Buyer upon acceptance at Buyer's facility.

18. **REJECTION OF GOODS.** Rejected goods shall be held at the destination by Buyer at Seller's cost and risk, provided that Buyer shall notify Seller of such rejection. Goods rejected as not conforming to this Purchase Order shall be returned at Seller's expense, including transportation and handling costs. Buyer at its sole discretion, may require Seller to replace any goods which Buyer is entitled to reject hereunder or to grant a full refund or credit to Buyer in lieu thereof. Where Buyer elects a refund or credit, such refund or credit shall be made within 5 days of Buyer's rejection notice. Seller shall bear all risk after notice of rejection, and Seller will, if requested to do so by Buyer, at Seller's expense, promptly replace such goods, in whole or in part, thereof which are defective. If Seller is unable or

refuses to promptly replace such goods, Buyer may replace such goods through other sources and charge Seller the cost incurred by Buyer.

19. **BREACHES.** In the event of any breach by Seller of any provision of this Purchase Order or in the event of the assertion by any other parties of any claim or lien against the Buyer or any of its property, arising from or relating to Seller's performance under this Agreement, the Buyer shall have the right to retain out of any payments due or to become due to Seller an amount sufficient, in the Buyer sole discretion, to offset any and all loss, damage or expense that the Buyer does or may suffer, until the breach or claim has been remedied or cured by Seller to the Buyer's satisfaction. This right shall be in addition to all other rights under this Agreement, at law, or equity, and shall not constitute an election of remedies.

20. **EQUAL OPPORTUNITY.** In the performance of this Agreement, the Seller and the Buyer shall not engage in any conduct or practice which violates applicable law, order, or regulation prohibiting discrimination against any person by reason of race, religion, national origin, sex, age, handicapped condition, or veteran's status. If this Agreement is subject to Executive Order 11246, as amended, the Seller and the Buyer shall comply therewith.

21. **LIMITATION OF LIABILITY.** IN NO EVENT SHALL THE BUYER BE LIABLE IN CONTRACT, TORT, OR OTHERWISE FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING WITHOUT LIMITATION PUNITIVE OR ECONOMIC DAMAGES OR LOSS PROFITS, REGARDLESS OF WHETHER THE BUYER SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY.

22. **INDEMNIFICATION.** To the fullest extent permitted by law, Seller hereby agrees to fully indemnify, defend and hold harmless the Buyer and its affiliates from and against any and all losses, costs (including without limitation attorney's fees), damages, injuries, liabilities, claims, liens, demands, taxes, penalties, or fines ("Losses") in any manner arising out of or in connection with the purchase, sale or use of the Goods described in the Purchase Order, Seller's obligations under this Agreement, or breach of of the terms of sale existing between the parties.

23. **OWNERSHIP OF WORK PRODUCT.** All work product, property, data documentation, information or materials conceived, discovered, developed or created by the Seller pursuant to this Agreement (collectively, the "Work Product") shall be owned exclusively by the Buyer. To the greatest extent possible, any Work Product shall be deemed to be a "work made for hire" (as defined in the United States Copyright Act, 17 U.S.C.A. §101 et seq., as amended) and owned exclusively by the Buyer. Seller hereby unconditionally and irrevocably transfers and assigns to the Buyer all right, title and interest in or to any Work Product.

24. OBLIGATIONS OF SELLER.

a. Compliance with Laws, Regulations, Procedures, Programs and Standards.

i. shall comply with (i) all applicable federal, state and local laws, statutes, rules, permits, regulations, ordinances or orders issued by any governmental authority having jurisdiction over the Work or the Work Site, including but not limited to, all laws, statutes, rules, permits, regulations, ordinances and orders regarding labor, safety, fire, public health, worker health and safety, and protection of the human and natural environment, and (ii) all of Buyer's applicableWork Site Environmental Health, Safety and Security Procedures, Programs and Standards.

ii. Seller agrees that if it or any of its employees or subcontractors violate any applicable law or regulation, Buyer shall be entitled, acting in good faith, to terminate this Agreement for Cause as provided herein in Section 20 without prejudice to any other available rights or remedies.

b. Permits and Licenses. Prior to commencing and at all times while performing the Work, Seller shall, and shall cause its Subcontractors to, have and maintain, at its own cost and expense, all permits, licenses, approvals, registrations, variances, certifications and/or other authorizations required to perform the Work by federal, state or local laws, regulations, rules, ordinances or statutes, including without limitation those laws, regulations, rules, ordinances or statutes pertaining to protection of the human and natural environment (collectively "Permits"). Upon request of the Buyer, Seller shall furnish copies and/or evidence thereof to the Buyer;

C. Enviroment Requirements At its own cost and expense, Seller agrees that it shall adhere to the following requirements and obligations:

i. Chemicals. Seller agrees that prior to bringing chemicals (e.g., solvents, lubricants, fuels, oils, inhibitors, etc.) or any such product that may be contained in any equipment furnished to Buyer as a part of the Work onto the Work Site and/or Buyer Property, it shall (i) provide Material Safety Data Sheet(s) or similar documents to Buyer for such chemicals and (ii) for any chemicals in excess of one gallon obtain written preauthorization from Buyer. Seller shall be responsible for temporary storage of chemicals at the Work Site and/or Buyer Property and shall remove all excess chemicals at completion of the Work.

ii. Waste. Unless otherwise agreed in writing, Seller shall be responsible for controlling, sampling, handling, storage, transportation, and disposal of all waste generated from its performance of the Work. Seller shall ensure that waste is properly analyzed and labeled for purposes of handling, storage, transportation and disposal. Seller shall dispose of all waste at a properly permitted, off-site waste disposal facility, and shall not dispose of waste at the Work Site or on Buyer Property without Buyer's advance written consent. Copies of all paperwork concerning disposal of waste generated at the Work Site and/or on Buyer Property shall be delivered promptly to Buyer.

iii. Equipment. Seller shall keep and maintain all Seller equipment in good operating condition and repair, and shall perform maintenance, repairs, cleaning and re-fueling of its equipment not on Work Site or Buyer Property, unless otherwise agreed in writing. Seller shall implement precautions against accidents, spills, vapor release, and contamination and shall protect equipment stored temporarily at the Work Site or on Buyer Property from misuse and tampering.

iv. Storage Tanks Seller shall not exceed above-ground storage tank or underground storage tank ("AST"/"UST") capacity limits. Seller shall have and maintain appropriate protective measures for AST/UST while on Work Site or Buyer Property.

v. Spill Prevention and Remediation. Seller shall have and maintain written procedures for preventing, responding to, and mitigating the spill of any chemical, as a foreseeable result of the Work, even if the likelihood of a spill is deemed remote. Seller shall ensure that all spills are immediately reported to Buyer.

vi. ***Seller is hereby notified that the Work Site may contain hazards including, but not limited to, anhydrous ammonia, formic acid, sulfuric acid, sodium hydroxide, hydrogen gas, asbestos containing , paint containing lead, and low activity cesium 137 sources for densitymeasurement level detection.*** Seller will inform all Seller employees and subcontractors that these hazards may exist prior to performing WorkSite.

vii. In its sole discretion,Buyer shall have the right to stop the Work for environmental reasons, including without limitation Seller's non-compliance with any of the foregoing requirements. If Seller's fault or non-compliance causes such a work stoppage, then Buyer shall not be liable for stand-by time, start-up time, or other related costs and expenses.

d. Safety and Security. Seller agrees that it shall adhere to and abide by the following requirements:

i. provide adequate protection for its equipment. Seller's employees and subcontractors and all Work, and shall provide such suitable safety appliances as may be needed to safely perform all Work;

ii. perform all Work under, and shall ensure that all Seller's employees and subcontractors engaged in any Work also operate under Buyer's safety rules and the relevant OSHA safety rules applicable to the Work, adhering to whichever safety rules are most stringent. Seller hereby confirms that he is familiar with, and shall abide by Buyer's Work Site Environmental, Health, Safety and Security Procedures, Programs and Standards in effect at the Work Site as well as safety procedures generally applicable to persons on Buyer's premises and Buyer Property;

iii. ensure all site Work is performed in accordance with and that all Seller Persons shall abide by Buyer's Work Site Environmental, Health, Safety and Security Procedures, Programs and Standards in effectat the Work Site; and

iv. In its discretion, Buyer shall have the right to stop the Work for safety reasons, including without limitation Seller's non-compliancewith any of the foregoing requirements. If Seller's fault or non- compliance causes such a work stoppage, then Buyer shall not be liable for stand-by time, start-up time, or other related costs and expenses.

e. Work Site.

i. Seller shall perform all Work without interference to Buyer's employees or operations in areas around the

Work Site or Buyer's Property.

ii. Seller shall keep the Work Site clean and free from rubbish on a daily basis. Upon completion of the Work, Seller shall remove all waste materials, both hazardous and nonhazardous (unless otherwise agreed in writing), tools, and Seller-owned equipment from the Work Site and leave the Work Site "broom clean."

f. Supervision and Training

i. Seller shall be solely responsible for (a) all means, methods, techniques, and procedures of each Project and the Work; and (b) the acts and omissions of all agents, representatives and employees of Seller, all Subcontractors and their agents, employees, and all other persons performing any Work.

ii. Seller shall enforce strict discipline and good order among its Personnel at all times. Seller shall not employ any person unfit or unskilled at that portion of any Work assigned to him/her.

iii. Seller shall be solely responsible for providing and ensuring that all workers, employees, representatives, agents, consultants, Subcontractors and visitors of Seller are provided with training, including, but not limited to, the Buyer's safety orientation that is proper and adequate for the performance of the Work and the Work Site. As applicable to the Work and the Work Site, Seller's training shall address the environmental requirements set forth above in Section 7.c (as applicable) and include without limitation risk assessment and reduction, and incident prevention, response, communication and mitigation.

iv. Assignment of Personnel: Seller shall select its employees ("Personnel") to perform services for Owner who are qualified to perform the requested services. Seller shall submit Personnel names and qualifications to Owner in advance of performing any services.

25 **DEFAULT.** Each of the following shall constitute an "Event of Default":

a. the other party is in material breach any obligation hereunder, which default is incapable of cure, or being capable, has not been cured within fifteen (15) days after receipt of notice of such default (or such additional cure period as the parties may agree in writing);

b. the Goods that are the subject of the Purchase Order continue to exhibit defects, causing frequent or extended periods of nonuse or serious disruptions of use, notwithstanding Seller's remedial or maintenance efforts, over a continuous period of three (3) months or more; or

c. insolvency of Seller, which shall include (i) commencing a voluntary case or proceeding or consenting to same seeking liquidation, reorganization or similar relief under any bankruptcy, insolvency or similar laws; (ii) making a general assignment for the benefit of creditors; (iii) failing generally to pay its debts when due; or (iv) taking any corporate action to authorize any of the foregoing.

Upon the occurrence of an Event of Default, the non-defaulting party may, upon fifteen (15) days' notice to the defaulting party, terminate the Agreement.

26. LAWS AND PROVISIONS. In addition to its obligations pursuant to Section 5, Seller shall comply fully with all applicable laws of the countries in which the obligations set forth in this Agreement shall be performed, as well as the applicable anti-corruption,anti-money laundering, anti-terrorism and economic sanction and anti-boycott laws of the United States, including without limitation, the United States Foreign Corrupt Practices Act.

In performing its obligations under this Agreement, Seller and its officers, directors, employees, agents and representatives agree that they have not, and will not:

a. directly or indirectly, offer, give, make, promise, pay or authorize the payment of any money, gift, or anything of value to any person that is an officer or employee of any government, or an officer or employee of any department, agency or instrumentality thereof, or of any public international organization, or any person acting in an official capacity on behalf of such government, department, agency or instrumentality thereof, or any candidate for or appointee to a political or government office, or to any political party; or

b. receive, transfer, retain, use or hide the proceeds of any criminal activity whatsoever, or employ or otherwise conduct business with a "designated person", namely a person or entity that appears on any list issued by the United

States or international organization such as the the United Nations as being involved in money laundering, terrorism, or drug trafficking, or as having violated economic or arms embargoes.

In the event Seller becomes aware or obtains knowledge of any violations of the above obligations of this Section 26, Seller shall promptly report to Buyer any such violation. Seller acknowledges receipt of a copy of Buyer's Code of Business Conduct and Ethics.

DULEVO®
INTERNATIONAL
Passion for Technology

200 QUATTRO

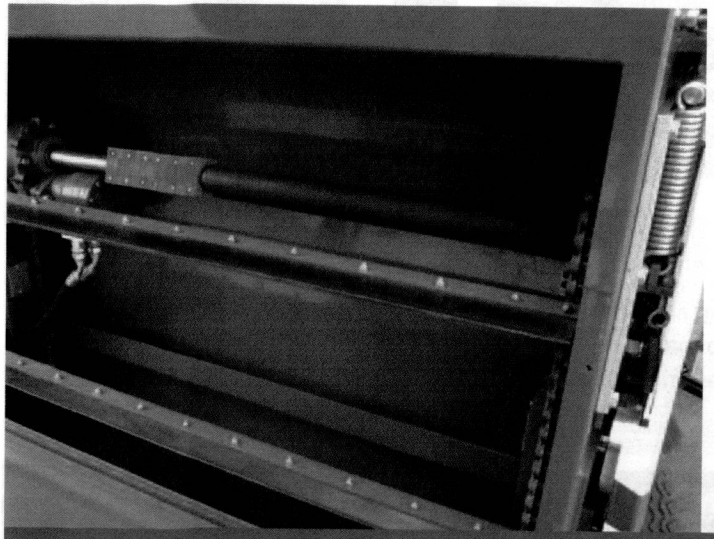
Concept

The only sweeper in the world capable of combining maneuverability, economy, and reliability with a sweeping quality that is veritably superior. If that which you are looking for is a sweeper guaranteeing a total control over particulates, maximum productivity and low costs of maintenance, the Dulevo 200 QUATTRO will surely answer your needs. Designed for the sweeping of both urban and industrial environments, such as cement works, construction enterprises, fruit and vegetable markets, ports, airports, and any other environment, this sweeper guarantees an ecological and efficient performance.

› combined system: In THEORY

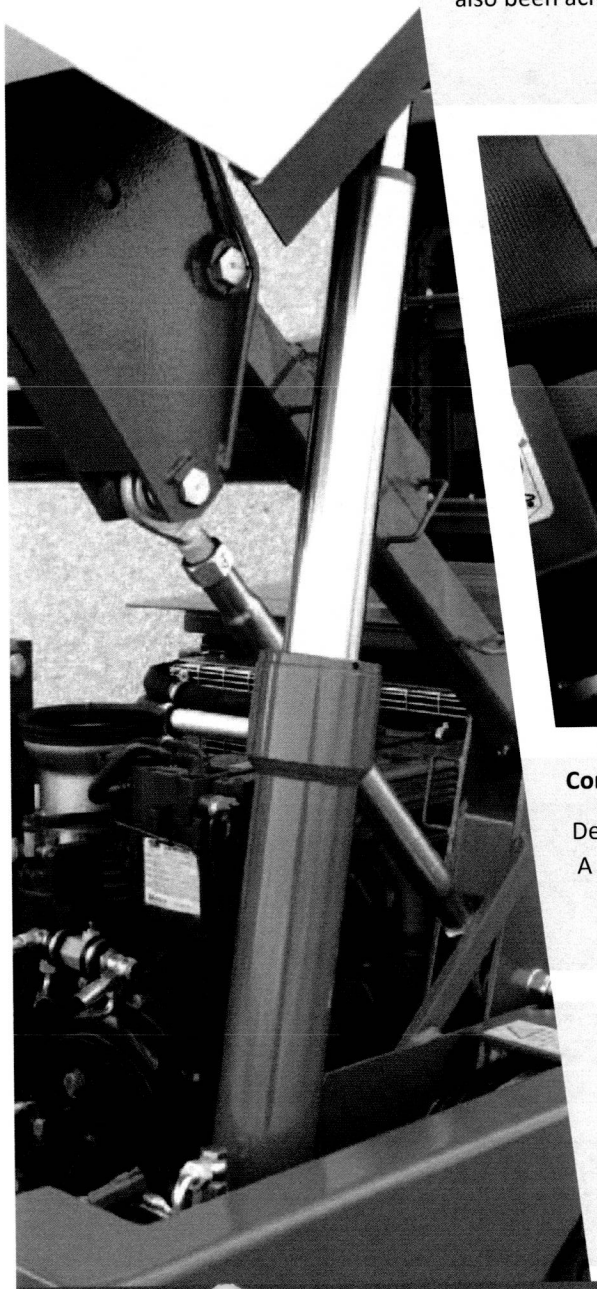
› to the Dulevo patented mechanical-suction-filtered system, the Dulevo 200 QUATTRO sweeper has a performance three times higher ny other traditional sweeper.

llection is mechanical and is facilitated by the side brushes, which convey the debris toward the centre of the machine, where the ical central brush then sends it at a high speed onto a vertical conveyor. The debris is loaded through the upper part in the refuse ner, this way optimizing the loading capacity of the machine. The dust raised by the cylindrical central brush is sucked and kept in the container thanks to the depression in the container itself created by two high-range and high-prevalence suction fans. The peculiar filtering system retains even the thinnest particulates and completes the sweeping cycle, guaranteeing the reintroduction in the nment of clean air only.



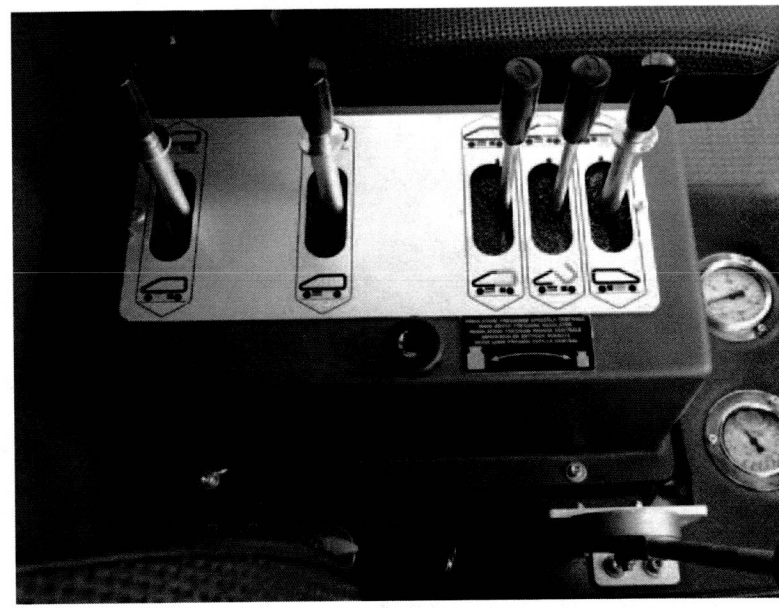
Dulevo combined system: In PRACTICE

Thanks to the strong points and the advantages of the mechanical-suction-filtered combined collection system, the Dulevo 200 QUATTRO is the ideal machine for the most diverse urban applications, in any climatic condition: Street sweeping in the summer time in the presence of sand and dust, disposal of autumnal deposits of leaves and pine needles, refuse collection after local markets, and sweeping in the winter period at particularly harsh temperatures. Indeed, only the side brushes (being located externally of the depression area) require a limited sprinkling of nebulized water for particulates control, allowing this way the sweeping with no need of water.



Quiet

In order to minimise noise during operation the highly efficient suction turbine has been kept as small as possible and is also positioned and shielded in such a way as to reduce the sound levels even further. But that's not all! The minimum possible noise level for operators and pedestrians have also been achieved by the use of sound-absorbent material and specific tests have been carried out to limit all possible sources of vibration.

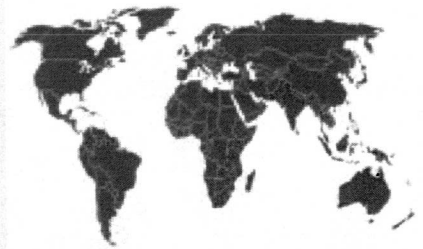


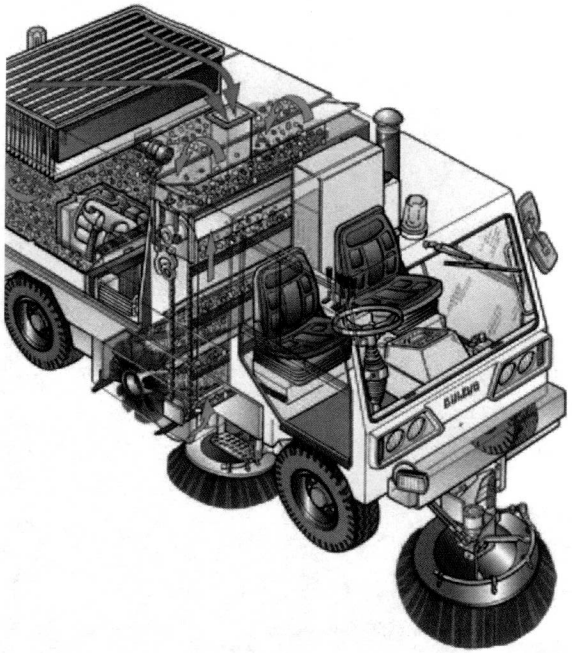
Comfortable

Designed to ensure maximum levels of operator comfort the 200 quattro cab also has simple and intuitive controls and excellent visibility. A comfortable, clean working environment is maintained within the cab by means of a pressurised filtered air system.

Double driving in the cab

Even though the left-side driving accounts for only 34% of the world population, it is more and more frequent the need for a double driving option within the cab; apart from the needs determined by the highway code, the double driving option in the cab allows an easy driving during transfer, at the same time enabling a more accurate performance of cleaning operations, thanks to a better view of the roadside.





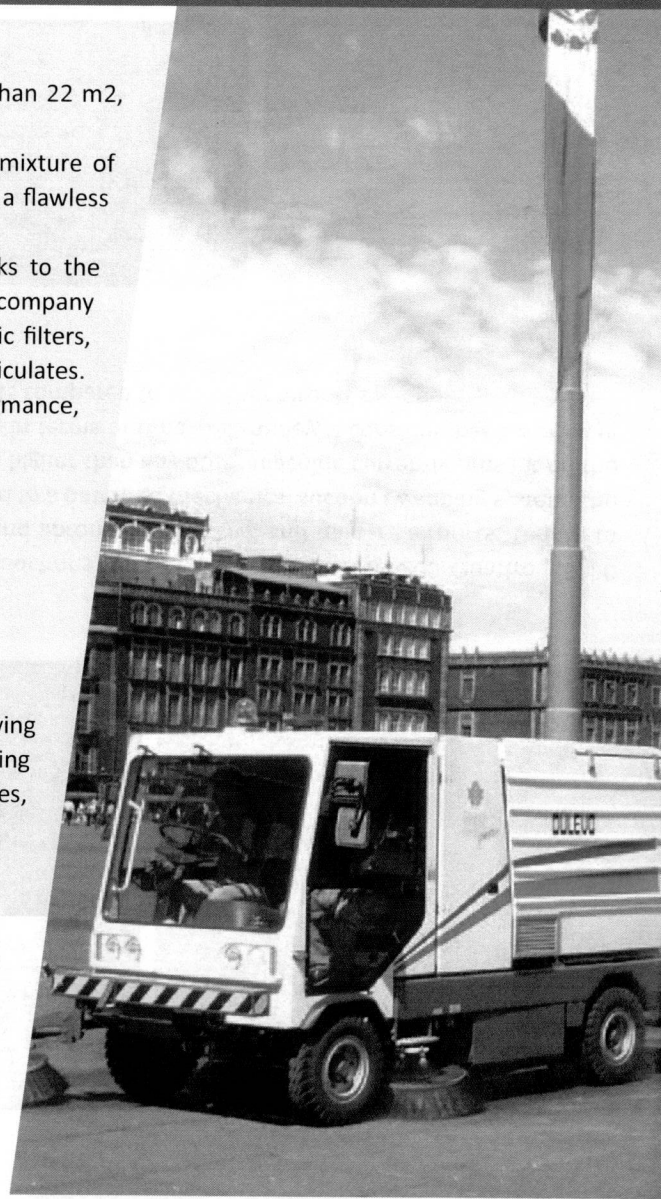
FABRIC FILTER & GORE® FILTER

The set of fabric pocket filters offers a wide filtering surface of more than 22 m2, which allows long hours of operation without any obstruction risks.
The DULEVO filter, made with an imperishable fabric composed by a mixture of polyester (73%) and cotton (27%), is basically indestructible and allows a flawless filtering up to 3 micron.
On the other hand, if the filtering needs require higher levels, thanks to the exclusive collaboration with the Gore® group, Dulevo is today the only company at a global level capable of providing an exclusive range of Gore® fabric filters, which guarantee the total abatement of PM10, PM5, and PM2,5 particulates.
The extraordinary filtering GORE® materials considerably improve performance, guaranteeing:

- longer duration;
- Improved cleaning ease;
- Reduced maintenance;
- A 35% increase in air capacity.

lless of what will be your choice, the filtering group includes an efficient jolting device, which may be directly operated from the driving n. The filter jolting device, which is hydraulically controlled before the unloading phase, acts on the metallic bars that keep the filtering s in an outstretched position, vigorously shaking them in all directions in order to guarantee the total detachment of the particulates, will then fall into the refuse container.

dust filters installed in the industrial sweeper have 5 YEARS warranty.



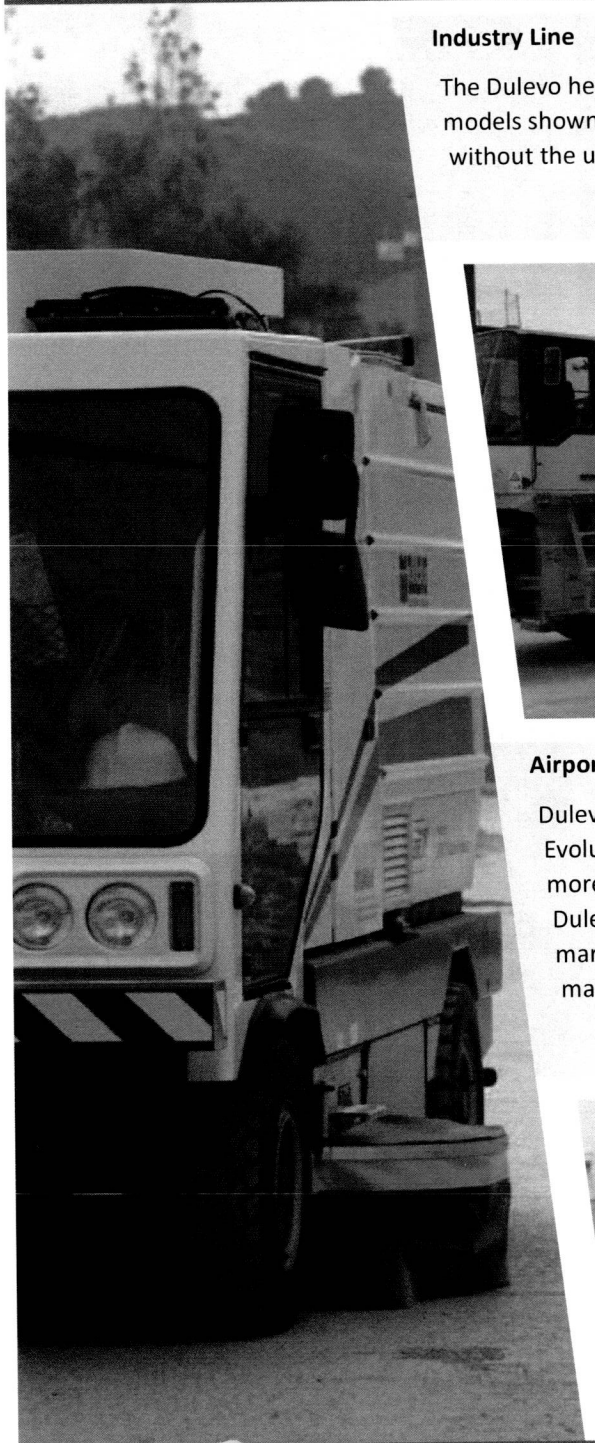
Filter

Dulevo filter

FILTERING CAPACITY (with Certificate of conformity issued by TÜV and DNV)	
Fraction with granulometry < 1 µm	63%
Fraction with granulometry < 2,5 µm	90%
Fraction with granulometry < 5 µm	98%
Fraction with granulometry < 10 µm	>99%

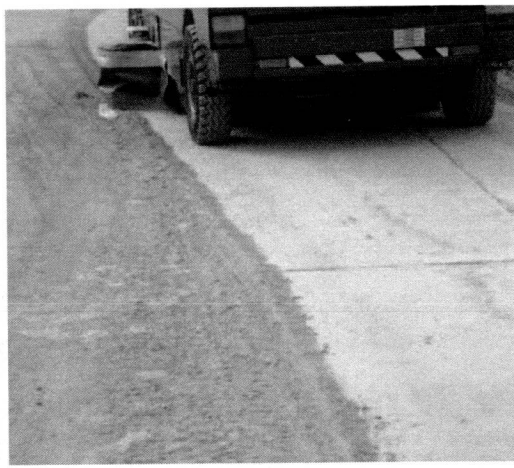
TÜV SÜD Italia

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2008 SINCERT DNV



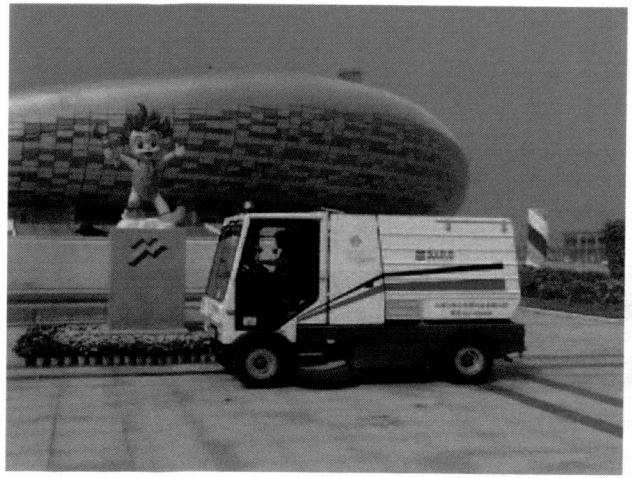
Industry Line

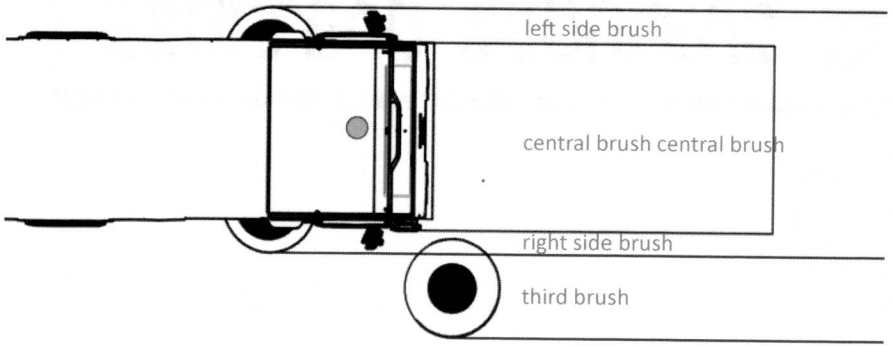
The Dulevo heavy duty sweepers range from robust walk behind sweepers for hard reach areas through to the large capacity 200 Quattro and 5000 models shown. Each Dulevo sweeper can be tailored to any customers' specific needs. An investment in any Dulevo will ensure perfect dust control without the use of water. If a clean facility is the desired outcome, look no further than Dulevo: a name you can trust!

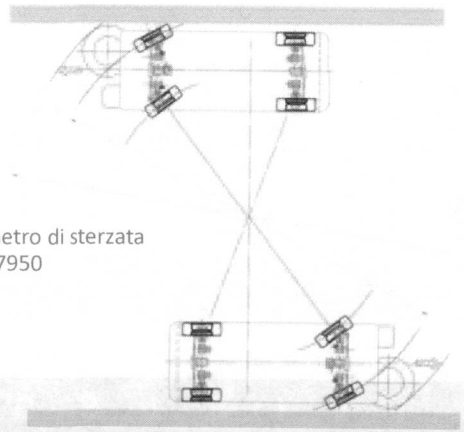


Airport Line

Dulevo International is addressing airport cleaning with a series of specific productions for heavy models such as 200 Quattro , 5000 Evolution and 5000 Veloce, expressly designed for cleaning airstrips, junctions and aprons, both in civil and military airports. Thanks to more than thirty years' experience in the field of industrial and urban cleaning and to a patented mechanical suction sweeping system, the Dulevo sweepers ensure: higher quality of cleaning, sweeping speed three times higher than any other machine currently present on the market, the unique method of dry-cleaning , with no water waste, huge savings in terms of time and money, a considerable lowering in maintenance costs for each vehicle a considerable saving in terms of overall costs compared to any other airport sweeper.







Diametro di sterzata
mm 7950

Technical data		200 QUATTRO
Sweeping width:		
-With central brush	mm	1300
-With right side brush	mm	1700
-With right and left brushes	mm	2100
-With third brush	mm	2600
Diameter of side brush	mm	850
Diameter of main brush	mm	480
Working capacity	m^2/h	78000
Maximum speed	Km/h	30
Waste hopper capacity	L	2500
Maximum dump height	mm	1600
Filtration PM10	%	99
Water tank capacity	L	400
Seats in the cabin	n°	2
Engine manufactered		VM
Fuel		Diesel
Lenght (with 3rd brush)	mm	3970 (4730)
Width	mm	2040
Height	mm	2375
Weight	Kg	3980

DULEVO INTERNATIONAL S.P.A.
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Specifications are not binding for our company and subject to change at any time without notice

APPENDIX 3
Dust Control Plan

Title:

Coal Combustion Residuals and Agremax Dust Control Plan

Approvals:

	Signature	Date
Prepared by: Winston R. Esteves	_____	_____
Reviewed by: Carlos M. Gonzalez	_____	_____
Environmental Coordinator	_____	_____
Ramiro Rivera Maintenance Manager	_____	_____
Elias Sostre Operations Manager	_____	_____
Manuel Mata President	_____	_____

Distribution List:

1. CCP Area
2. Material Handling
3. Environmental Coordinator
4. Operations & Maintenance Area
5. Plant Manager

Table of Contents

1. Purpose

This Standard Operating Procedure (SOP) identifies methods to prevent, reduce or mitigate fugitive dust from the coal combustion residuals and Agremax™ handling activities at the AES-PR site.

The primary purpose of this SOP is to explain how the requirements in Section 2.1.2.12 of the US Environmental Protection Agency's (EPA) 2008 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) - Dust Generation and Vehicle Tracking of Industrial Materials will be implemented and monitored at AES-PR.

2. Scope

The Plan described in this SOP only addresses dust emissions (including fugitive dust) from coal combustion residuals (ash) and Agremax™ handling equipment and operations which are non-point sources and area sources within the AES-PR property boundaries as shown in Appendix 1. It does not address particulate or gaseous emissions from point or other sources regulated under the facility's air emission permit.

It identifies sources of fugitive dust, outlines the techniques and practices for detecting, monitoring, controlling, minimizing and preventing dust emissions, provides employee training program guidelines to help them recognize potential sources of dust and the management practices to prevent and control them, identifies the persons and procedures responsible for control equipment availability / operation and maintenance and identifies the recordkeeping practices that will be followed.

3. Responsibilities

3.1. The Coal Combustion Products (CCP) and Material Handling (MH) leaders are the dust control site coordinators responsible for the implementation of this SOP, including: reading and understanding it, ensuring that all employees / workers / subcontractors know and understand their

dust control responsibilities, monitoring the worksite for compliance with the requirements of this SOP, designing watering schedules, ensuring that adequate watering capability is available, determining when to use standby controls when primary controls are ineffective, determining when to cease and start operations, maintaining records and revising the SOP as necessary, including when the primary and standby or contingency controls don't result in effective control.

3.2. The Shift Team Leaders and the CCP/MH Operators are responsible for controlling their operational areas to minimize dust generation. This includes limiting or stopping operations during high winds and/or visible dust plume conditions that cannot be controlled.

3.3. The CPH/MH Operators are responsible for enforcing the requirements of this SOP and notifying the dust control site coordinator or Shift Team Leader of any visible dust plumes which require immediate attention, including those that cross the site boundary. The operational activity that caused the emission will be ceased temporarily until a re-evaluation of the dust control measures is completed and additional controls are identified and implemented, if needed.

3.4. All dust control equipment i.e., water truck, sweeper, sprinklers, hoses, will be maintained in good operational order by the responsible areas. The water truck will be the responsibility of MH, the sweeper by CCP; all other controls will be the responsibility of the Maintenance Area. Each area will document and maintain records of how frequently equipment maintenance is done and of all equipment malfunctions and downtimes.

4. Safety Precautions

All AES-PR employees and contractors must use the required safety and personal protective equipment required for conducting the activities described herein, including but not limited to hard hats, safety glasses, harness, life preservers and other as appropriate.

5. Dust Emission Sources

The dust emission sources covered by this SOP are located at the southeast quadrant of the plant site and the marine dock. See Appendix 1

Fly ash and bottom ash is generated from the coal combustion process and stored in two elevated silos. The dry ash is transferred from the silos into bulk trailers for transport by public highway to off-site users.

Agremax, a manufactured aggregate also generated from the coal combustion process, is mixed in a pug mill that feeds a conveyor belt used to transfer the mixture to an open stockpile area. The stockpile is formed by a bulldozer or by dump trucks that are loaded by an excavator or front end loader, the trucks then dump onto the top of the stockpile. From the stockpile area the Agremax is loaded by an excavator or front-end loader into dump trucks for transport by public highway to off-site users. Alternatively, the Agremax can be fed by a bulldozer into a crusher located in the stockpile area. The crusher feeds a conveyor that transfers the Agremax to marine vessels in the dock area for shipment overseas. Dust can be generated from the ash-Agremax transfer operations, truck loading and unloading, crusher loading, from paved and unpaved haul roads within the site, and from the stockpile.

Most of the dust emissions from AES-PR are generated by wind erosion. The prevailing winds at the site blow from the north-northeast and south-southeast 90 % of the time at speeds of 4.5 to 18 miles per hour 95% of the time.

6. Controls

The main equipment and structures used for controlling dust emissions include a water truck with rear spray nozzles and front water cannon, a broom sweeper, mobile water sprinkler guns, large water hoses, fixed water spray nozzle systems / articulated telescoping spouts at drop and loading / shipping areas, a truck wheel cleaning station and curved-paved haul roads.

In addition to the use of the equipment and structures described above, primary (first approach) and contingency (standby or backup strategy) control measures are used to control the generation of dust emissions. Refer to the flowchart in Appendix 2.

Primary controls include initial and annual personnel training, a daily operational inspection checklist to monitor the implementation and effectiveness of the control measures, daily evaluation of weather forecast and real-time instrumental monitoring of weather conditions (precipitation, wind speed-direction [refer to AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002]), daily nighttime watering of stockpile surfaces and pre-shift watering of haul roads, daily log of water truck use, covered transfer conveyors, continuous observation of visible dust emissions (VDE), daily sweeping / cleaning of paved roads, maintenance / repair of paved road surfaces, immediate cleanup of track-out and material spillage onto paved roads, prohibited use of blower devices or dry rotary brushes or brooms, enforcement of posted vehicle and moving equipment speed limits to 10 miles per hour (mph) or less , traffic restrictions, minimization of drop distances at transfer points, loading of trucks to prevent their contents from dropping/leaking/ blowing or otherwise escaping, sweeping or spray-cleaning and covering dump trucks prior to leaving the facility, 6-inch minimum bed freeboard clearance requirements for loading dump trucks, surface roughening-compaction of stockpile surfaces, placing stockpile ridges at right angles to prevailing winds, conducting loading and unloading activities on the downwind side of the stockpile, watering of exposed areas before forecasted high winds, restriction or termination of stockpile disturbance and hauling activities during high-wind conditions (i.e., 25 miles per hour or higher) and scheduled washing of mobile equipment.

At the start of each shift or material handling equipment startup and at least twice daily, the CPH/MH Operators will assess the operational status of all controls and record such assessments using the Dust Control Inspection Checklist in Appendix 3 which will be used to monitor the implementation and effectiveness of the control measures. Water truck operations may be curtailed during wet weather if the CPH/MH Operators confirm that the Agremax is sufficiently wet as to not require further wet abatement (one inch of precipitation is equivalent to an application of 5.6 gallons of water per square yard). These determinations will also be recorded in the Dust Control Inspection Checklist.

If after the implementation of primary control measures, visible dust emissions persist, contingency control measures including daytime wetting of stockpile with sprinklers, applying chemical dust suppressants, surfacing of unpaved haul roads with aggregate cover / aprons and restriction /termination of activities will be implemented. Because the control effectiveness of chemical dust suppressants depend on the dilution rate, the application rate, time between applications, size/speed / amount of traffic and meteorological conditions any chemical dust suppressants used will be applied according to the manufacturer's instructions.

If primary and contingency controls don't result in effective control, this SOP must be revised.

The dust type / source and the primary control measures used for each source can be described as follows:

6.1. **Agremax- Ash / Paved Haul Roads**

Description: Emissions can be generated from uncovered truck beds, spillage from haul trucks, vehicle dust carryout and track out. Wind and traffic, including plant (front end loaders, trucks and trailers) and customer vehicles, re-suspend the deposited material creating secondary sources of dust emissions. The average vehicle weight is highly variable, ranging from small pick-up trucks (1 ton) to large trucks / trailers (30 tons).

Control Methods and Equipment: Wet suppression by water truck with rear water sprinklers and water cannon, daily pavement cleaning with water hoses, speed limit restrictions to 10 mph or less posted along haul route, daily wet mechanical sweeping of pavement, immediate cleanup of material spillages, dump truck freeboard / cover, wheel washing and hosing at fixed station, curved shoulders and pavement surface repair as needed.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet, clean and structurally sound.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.2. **Agremax / Unpaved Roads**

Description: Emissions can be generated from wind erosion of uncovered truck beds and road surfaces and heavy equipment traffic (bulldozer, excavator, front end loader, trucks and trailers).

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon, vehicle speed limits to 10 mph or less, dump truck freeboard / cover.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.3. **Agremax / Stockpile.**

Description: Emissions are generated from the initial Agremax conveyor drop discharge into the stockpile area, pushing by heavy equipment to create the stockpile, loading and unloading of dump trucks to create the stockpile and for off-site transportation, pushing Agremax into the crusher feeding the conveyor to the dock and from wind erosion of stockpile surfaces.

Control Methods and Equipment: Nighttime wet suppression of stockpile surfaces by mobile sprinkler guns (10), daytime wet suppression of stockpile surfaces by water truck with water cannon, fixed water spay nozzles at conveyor drop discharge point, reduced drop heights for truck loading, hose wetting of crusher feed and dump truck unloading , surface roughening - compaction of stockpile surfaces with bulldozer, stockpile ridges at right angles to prevailing winds, confining loading and unloading to downwind side of stockpile, watering of exposed areas before forecasted high winds. Windbreaks and enclosures are not practical controls for the Agremax stockpile because of its size and continuous change in shape.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep stockpile surfaces wet.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.4. **Ash / Transfer to Bulk Trailers**

Description: Fugitive dust emissions are generated during the chute connection and disconnection steps required for loading ash from the elevated storage silos into bulk trailers for off-site transportation.

Control Methods and Equipment: Discharge drop height control using articulated-telescopic loading spout, wet suppression with water spray nozzles at west side of loading bay, truck- trailer cleaning with water hose before leaving the loading bay.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.5. **Agremax / Dump Truck Loading and Unloading**

Description: Dust emissions are generated during the loading of Agremax into dump trucks to create the stockpile or for off-site transportation and during unloading of dump trucks into the stockpile.

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon or large hoses, front end loader and excavator discharge drop height reduction.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.6. **Agremax / Conveyor Loading and Transfer**

Description: Dust emissions can be generated by wind blowing over the elevated conveyor used to transfer Agremax to marine vessels at the dock area and when it is discharged into the vessel's holding compartment.

Control Methods and Equipment: Covered conveyors, discharge drop height control with articulated- telescopic loading spout.

Frequency of Application: Each loading

Monitoring: Twice Daily (During Vessel Loading)

Recordkeeping: Dust Control Inspection Checklist

7. Training

To ensure that the dust control practices are followed, AES-PR will conduct an employee awareness training that will include all applicable dust control measures and the importance of strict compliance. Records of the trainings will be maintained, including the sign-in sheets.

7.1 The designated employees and/or contractors responsible for the performance and/or supervision of dust control activities must receive initial and yearly classroom and hands-on training on this SOP.

7.2 Training in this SOP will be provided prior to commencing duties at the affected areas and at least every year following the Training Syllabus in Appendix 4.

7.3 All trainings will be documented using the Employee Training Attendance Log in Appendix 5.

8. Monitoring and Recordkeeping

8.1. Inspections

Trained personnel will conduct twice-daily inspections to ensure that appropriate dust control measures are being implemented using the Checklist in Appendix 3.

8.2. Recordkeeping

All inspection checklists, logs, trainings and records related to this SOP will be kept for three years after the expiration of the site's storm water discharge permit.

9. References

1- AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002.

2- Air & Waste Management Association. Air Pollution Engineering Manual. 2000.

3- California Stormwater Quality Association. California Stormwater BMP Handbook-Construction. Wind Erosion Control WE-1. May 2011.

4- Noyes Data Corporation. Dust Control Handbook. Pollution Technology Review No. 161. 1988.

5- US Department of Health and Human Services. Dust Control Handbook for Industrial Minerals Mining and Processing. January 2012.

6- United States Environmental Protection Agency (USEPA). Emission Control Technologies and Emission Factors for Unpaved Road Fugitive Emissions. EPA 625/5-87-022. September 1987.

7- USEPA. Control of Open Fugitive Dust Sources. EPA 450/3-88-008. September 1988

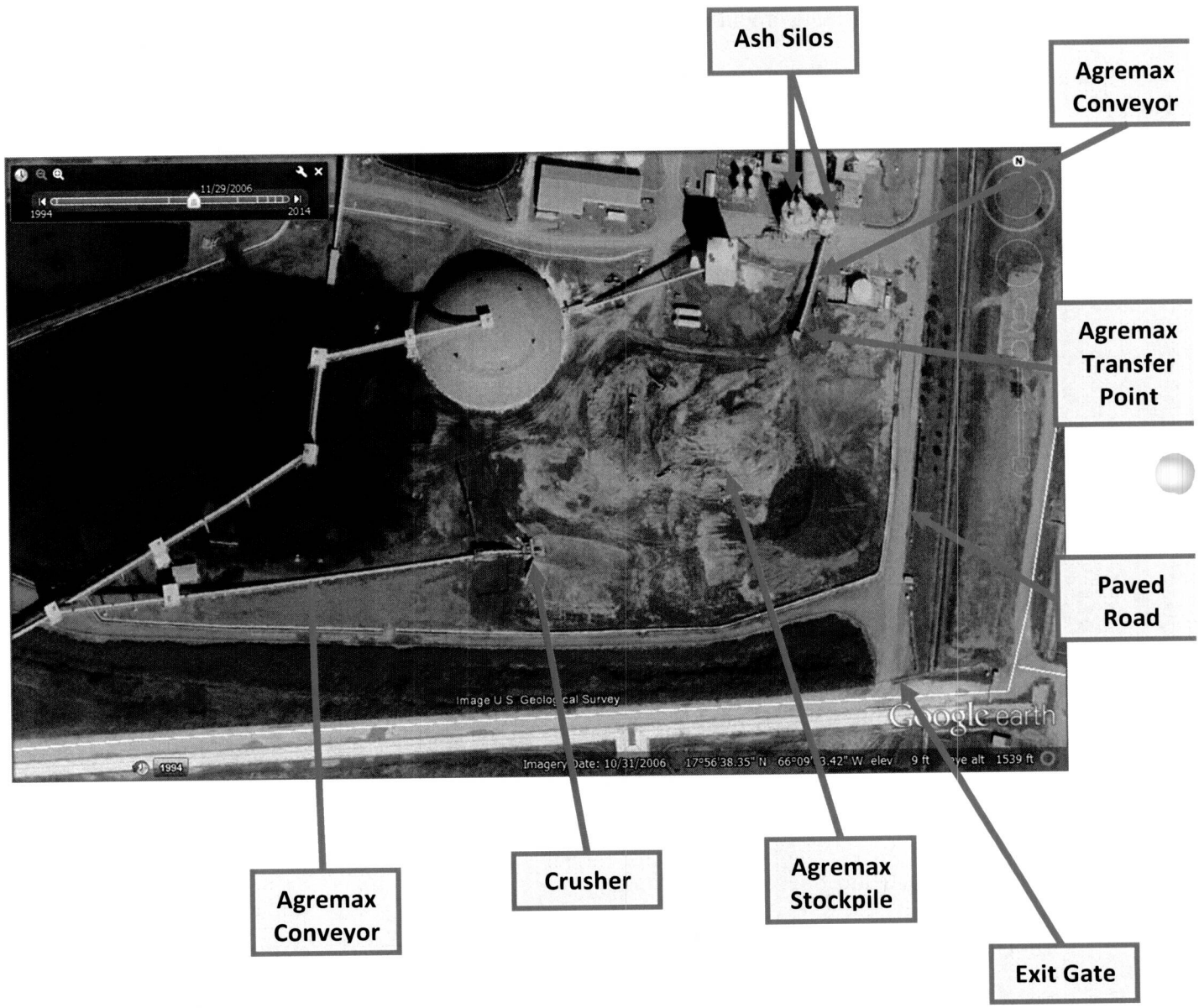
8- USEPA. AP-42 Compilation of Air Pollutant Emission Factors. Volume 1: Stationary Point and Area Sources. Chapter 13: Miscellaneous Sources. January 1995.

9- USEPA. Storm Water Management Fact Sheet- Dust Control EPA 832-F-99-003. September 1999.

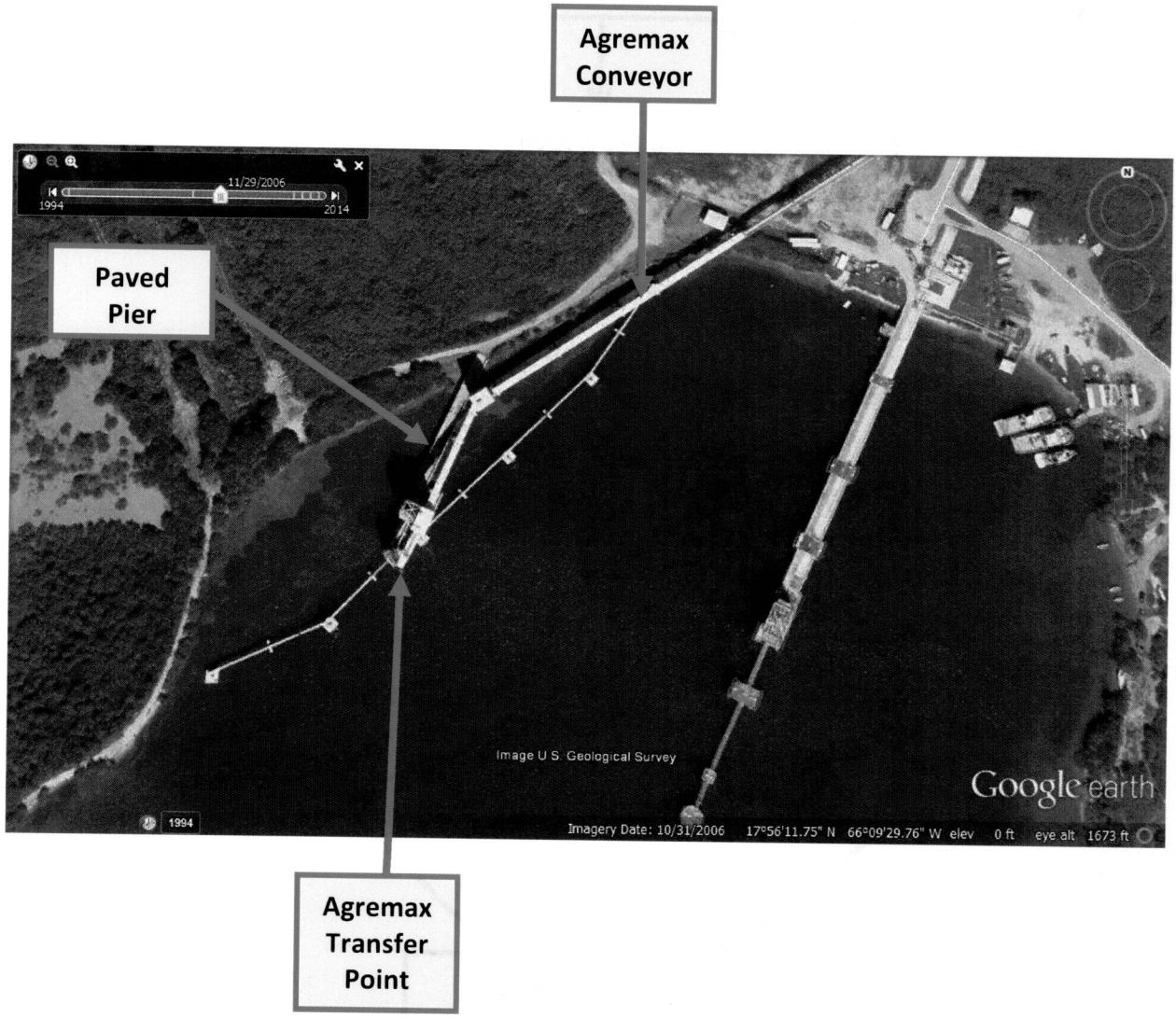
10- USEPA. Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Form Industrial Activities, Federal Register, Vol. 73, No. 189, September 29, 2008.

11- USEPA. Water: Best Management Practices; Dust Control. Source: http://www.epa.gov/polwaste/npdes/swbmp/Dust-C. Web Page last updated on Tuesday, July 1, 2014; Accessed and printed on March 27, 2015. [4 pages]

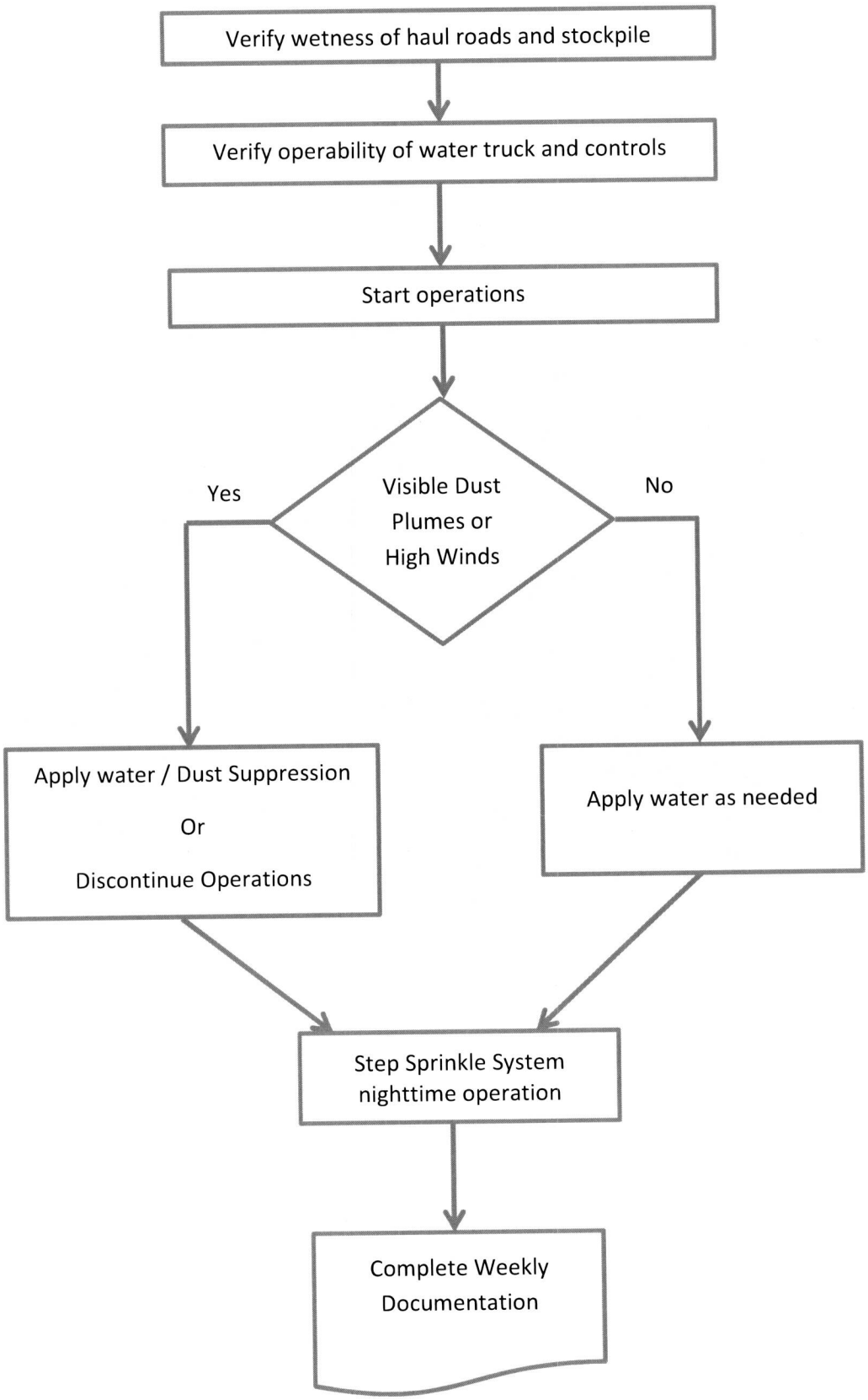
AES Puerto Rico
Plant Dust Control Map



AES Puerto Rico
Plant Dust Control Map



Dust Control Activity Flow Chart



AES Puerto Rico

Dust Control Checklist

Control Equipment

Skipper Sprinkler Guns (10)	_____ Operational	_____Not Operational
Water Truck (1)	_____ Operational	_____Not Operational
Broom Sweeper (1)	_____ Operational	_____Not Operational
Large Water Hoses ( )	_____ Available	_____Not Available

Paved Haul Roads

Surface in Good Condition	_____ Yes	_____ No
Wet Surfaces	_____ Yes	_____ No
Blowers or Dry Sweeping Used	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No
Visible Speed Limit Signs Posted	_____ Yes	_____ No
Spilled Materials	_____ Yes	_____ No
Tracked Sediments	_____ Yes	_____ No
Wheel Washer Station	_____ Yes	_____ No
- Adequate Water level	_____ Yes	_____ No
- Adequate Aggregate Depth	_____ Yes	_____ No
- Aggregate Surface Clean	_____ Yes	_____ No

Haul Trucks

Within Speed Limits	_____ Yes	_____ No
Within Established Routes	_____ Yes	_____ No
Covered with Tarp	_____ Yes	_____ No

Free of Debris _____ Yes _____ No

Adequate Freeboard _____ Yes _____ No

Low Loading Drop Height _____ Yes _____ No

Unpaved Haul Roads

Wet Surface _____ Yes _____ No

Aggregate Cover _____ Yes _____ No

Over Watering Observed _____ Yes _____ No

Road Erosion Observed _____ Yes _____ No

Visible Emissions _____ Yes _____ No

Conveyors

Silos to Stockpile Fully Enclosed _____ Yes _____ No

Stockpile to Dock Silos Fully Enclosed _____ Yes _____ No

Water Applied at Conveyor Drop Point _____ Yes _____ No

Water Applied at Crusher Feed _____ Yes _____ No

Visible Emissions _____ Yes _____ No

Fixed Transfer Points

Silos to Stockpile Water Sprays Operational _____ Yes _____ No

Stockpile Crusher Feed Wet _____ Yes _____ No

Conveyor to Marine Vessel
Telescoping Spout Operational _____ Yes _____ No

Silos to Bulk Trailers
Telescoping Spout Operational _____ Yes _____ No

Leak Proof Spout Connection _____ Yes _____ No

Ash Silos Water Curtain Operational _____ Yes _____ No

Agremax Stockpile

Wet Stockpile Surfaces	_____ Yes	_____ No
Water Sprays Overlap	_____ Yes	_____ No
Chemical Dust Suppressants Used	_____ Yes	_____ No
Activities on downwind side	_____ Yes	_____ No
Slope Surface Roughening /Compaction	_____ Yes	_____ No
Ridges at Right Angles to Prevailing Winds	_____ Yes	_____ No
Slope Erosion Observed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Wind Speed_____ **Wind Direction**_____

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name / Signature_____

Date_____ Time_____

DUST CONTROL TRAINING SYLABUS

Subject Category: Compliance with permit requirements

Training Length: 2- 4 hr

Delivery Mode: Lecture, field exercise

Training Instructional Materials / Handouts: Power Point Presentation and Hard Copies

Schedule: Once / year

Training Purpose: Provide information to employees responsible for ash and Agremax handling activities

Instructors: AES or contracted

Written Exam: No

Practical Exam: Yes

WEB Resource: N/A

Topics to be covered:

Dust Control Requirements

Fugitive Dust Sources

Primary and Contingency Controls

Prohibited Practices

Responsibilities

Monitoring and Recordkeeping

Corrective Actions

AES
Puerto Rico

Dust Control SOP Training Attendance

Date: _____

Name	Shift/Team	Signature
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

AES/EPA -009

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May 11, 2015

Chief, Multimedia Permits and Compliance Branch
Caribbean Environmental Protection Division
U.S. Environmental Protection Agency, Region 2
City View Plaza II, Suite 7000
48 RD. 165 Km. 1.2
Guaynabo, Puerto Rico 00968-8069

RE: Administrative Order on Consent Docket Number CWA-02-2015-3102 – Compliance with AOC Section VII, ¶71

Dear Jose:

On March 18, 2015 AES Puerto Rico LP ("AES-PR") and the United States Environmental Protection Agency ("EPA") entered into the above referenced Administrative Order on Consent ("AOC"), under which AES-PR is obligated to comply with certain requirements (AOC Section VII, Ordered Provisions). All capitalized terms in this letter shall have the meaning as defined in the AOC.

In compliance with the new AOC requirement, AES-PR hereby submits the required Comprehensive Annual Site Inspection as attachments to this letter.

We respectfully ask EPA to advise AES-PR promptly, should the agency have any concerns with this submission. Should AES-PR not receive any timely comments from EPA, we will reasonably consider that EPA has agreed that AES-PR has satisfied this requirement of AOC Section VII, ¶71 in full. Should EPA require additional time to review and provide comments back to AES-PR, that review time is of course entirely beyond the control of AES-PR and should be added to the required time frame for AES-PR to comply with this requirement.

Regards,

Manuel Mata
President AES Puerto Rico
Attachments

Administrative Order on Consent
AES Puerto Rico Coal Fired Power Plant
Docket Number CWA-02-2015-3102
NPDES Tracking Number PRU020663

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Manuel Mata
President AES Puerto Rico

5/11/15

Date

AES Puerto Rico

2014

Annual Comprehensive Site Inspection Report

"Pursuant to Part 7.2, 4.3, 4.3.2, 4.1.1, 4.1.2 and 3.4 of the MSPG and the Administrative Compliance Order Docket Number CWA-02-2015-3102, Section VII ¶71"

Reporting period

January 1,2014 to December 31, 2014

Contents

1.0 Executive Summary

The following report summarizes the requirements under the Administrative Compliance Order "ACO", Docket Number CWA-02-2015-3102, Section V-71 of the ordered provisions.

The comprehensive annual site inspection report was conducted on December 16, 2014 in the facility of AES Puerto Rico Coal-Fired Power Plant and Marine Cargo Handling Facility, located at:

State Road 3, Km. 142.0
Barrio Jobos
Guayama, Puerto Rico 00784

The comprehensive site inspection was performed by Hector Avila the Environmental Coordinator and member of the stormwater pollution team for AES-PR and Winston Esteves, PE, BCEE, QEP, CHMM, CPESC, CESSWI an independent Environmental Consultant, hired by AES-PR to assist in the site inspection, as well as provide any best practices identified in the industry to ensure that we are continuously meeting our compliance status.

This report summarizes all site findings related to the requirements identified above and it provides its recommendations to improve the program in the facility ensuring continuous compliance status.

2.0 Background, information and areas covered under this inspection

Section 7.2 of our MSGP requires that AES-PR conduct an annual comprehensive site inspection. The annual comprehensive site inspection is intended to be a more in-depth version of the routine facility inspection. Our annual comprehensive site inspection evaluated the condition of control measures, taking into account trends observed in analytic and visual stormwater samples taken during the year, and found during routine inspections.

The inspection that was performed by AES-PR for the 2014 Annual Report covered all areas of our facility affected by the requirements of your industrial stormwater general permit, including all potential stormwater pollutant sources identified in the SWPPP, areas where control measures are used to comply with applicable effluent limits, and areas where spills and leaks have been documented in the three years prior to the annual comprehensive site inspection. In addition, our annual inspection included a review of visual stormwater monitoring data collected each quarter of the previous year and the results of the routine site inspections.

3.0 Reporting and Record keeping "Section 7.0 of the MSGP"

2.1 Annual Report Requirements

As required under section 7.2 of our MSGP, AES-PR is required to submit an annual report to EPA that includes the findings from your Part 4.3 of the MSGP, comprehensive site inspection and any corrective action documentation as required in Part 3.4 of the MSGP. If corrective action is not yet completed at the time of submission of this annual report, you must describe the status of any outstanding corrective action(s). In addition to the information required in Parts 3.4 (Corrective Action Report) of our MSGP and 4.3.2 (Comprehensive Site Inspection Documentation) of our MSGP, AES-PR will include the following information with our annual report:

- Facility name
- NPDES permit tracking number
- Facility physical address
- Contact person name, title, and phone number

As EPA had recommended in Section 7.2 of our MSGP, AES-PR utilized the formatted report using the Annual Reporting Form provided as Appendix I of our MSGP.

3.0 Comprehensive Site Inspections "Section 4.3, 4.3.1 & 4.3.2 of the MSGP"

3.1 Comprehensive Site Inspection Procedures

AES-PR is required to conduct annual comprehensive site inspections while we are covered under the existing ACO in accordance with sections 4.3 of the MSGP. Annual, as defined in this Part, means once during each of the following inspection periods beginning with the period you are authorized to discharge under this permit:

AES-PR is waived from having to perform a comprehensive site inspection for an inspection period, as defined in the ACO, if you obtain authorization to discharge less than three months before the end of that inspection period.

Should our coverage be administratively continued after the expiration date of this permit, AES-PR is required to continue to perform these inspections annually until we are no longer covered.

AES-PR must conduct our site inspections by qualified personnel with a least one member of our stormwater pollution prevention team participating in the comprehensive site inspections.

Our comprehensive site inspections cover all areas of the facility affected by the requirements in this ACO and MSPG, including the areas identified in the SWPPP as potential pollutant sources (see Part 5.1.3 of the MSGP) where industrial materials or activities are exposed to stormwater, any areas where control measures are used to comply with the effluent limits in Part 2 of the MSGP, and areas where spills and leaks have occurred in the past 3 years. The inspections have also included a review of monitoring data collected in accordance with Part 6.2 of the MSGP. Inspectors have considered the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors have examined the following:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- Control measures needing replacement, maintenance, or repair.

Stormwater control measures required by this permit were observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

Under the MSGP, our annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

3.2 Comprehensive Site Inspection Documentation

AES-PR is required to document the findings of each comprehensive site inspection and maintain this documentation onsite with our SWPPP as required in Part 5.4 of the MSGP. In addition, we are required to submit this documentation in an annual report as required in Part 7.2 of the MSGP. At a minimum, your documentation of the comprehensive site inspection must include (see the Annual Reporting Form included as Appendix I of the MSGP):

- The date of the inspection;
- The name(s) and title(s) of the personnel making the inspection;
- Findings from the examination of areas of your facility identified in Part 4.3.1 of the MSGP;
- All observations relating to the implementation of your control measures including:
    - previously unidentified discharges from the site,
    - previously unidentified pollutants in existing discharges,
    - evidence of, or the potential for, pollutants entering the drainage system;
    - evidence of pollutants discharging to receiving waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring, and
    - additional control measures needed to address any conditions requiring corrective action identified during the inspection.
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
- A statement, signed and certified in accordance with Appendix B, Subsection 11 of the MSGP.

Any corrective action required as a result of the comprehensive site inspection will be performed consistent with Part 3 of MSGP.

4.0 Corrective Actions "Section 3.0, 3.1 and 3.2 of the MSGP"

4.1 Conditions Requiring Review and revision to Eliminate Problem

If any of the following conditions occur, AES-PR will review and revise the selection, design, installation, and implementation of our control measures to ensure that the condition is eliminated and will not be repeated in the future:

- an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit) occurs at your facility;
- a discharge violates a numeric effluent limit;
- AES-PR becomes aware, or EPA determines, that our control measures are not stringent enough for the discharge to meet applicable water quality standards;
- an inspection or evaluation of our facility by an EPA official, or local, State, or Tribal entity, determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or
- we find in your routine facility inspection, quarterly visual assessment, or comprehensive site inspection that our control measures are not being properly operated and maintained.

4.2 Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, AES-PR will review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

- construction or a change in design, operation, or maintenance at our facility significantly changes the nature of pollutants discharged in stormwater from our facility, or significantly increases the quantity of pollutants discharged; or
- the average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedance of the 4 quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedance, triggering this review.

4.3 Corrective Action Report

AES-PR is required within 24 hours of discovery of any condition listed in Parts 3.1 and 3.2 of the MSGP, to document the following information (i.e., questions 3-5 of the Corrective Actions section in the Annual Reporting Form, provided in Appendix I of the MSGP):

- Identification of the condition triggering the need for corrective action review;
- Description of the problem identified; and
- Date the problem was identified.

Within 14 days of discovery of any condition listed in Parts 3.1 and 3.2, AES-PR will document the following information (i.e., questions 7-11 of the Corrective Actions section in the Annual Reporting Form, provided in Appendix I):

- Summary of corrective action taken or to be taken (or, for triggering events identified in Part 3.2 of the MSGP where we determine that corrective action is not necessary, the basis for this determination);
- Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

AES-PR will submit this documentation in an annual report as required in Part 7.2 of our MSGP and retain a copy onsite with your SWPPP as required in Part 5.4 of our MSGP.

5.0 AES Puerto Rico "2014 Annual Comprehensive Site Inspection Report Findings and Corrective Actions"

Inspection Members and Background: The comprehensive site inspection was performed by Hector Avila the Environmental Coordinator a member of the stormwater pollution team for AES-PR and Winston Esteves, PE, BCEE, QEP, CHMM, CPESC, CESSWI an independent Environmental Consultant, hired by AES-PR to assist in the site inspection, as well as provide any best practices identified in the industry to ensure that we are continuously meeting our compliance status.

This report summarizes all site findings related to the requirements identified above and it provides its recommendations to improve the program in the facility ensuring continuous compliance status.

Findings: During the Comprehensive Annual Evaluation, AES-PR had identified 5 various findings that required attention and corrective actions, none of which were directly related to any Unauthorized Releases or direct negligence on behalf of AES-PR. In summary, the findings identified were relatively low in nature, and were corrected in a timely manner. Please note that during this period of time, AES-PR was working under an Administrative Compliance Order, and were conducting various engineering analysis with the purpose of identifying and implementing new BMP's both Structural and Non-Structural for overall improvement's to the Facility.

Corrective Actions: As required in Section 3.4 of our MSGP "Corrective Action Report", AES-PR had completed questions 7-11 covered in the Annual Reporting form, provided in Appendix I of the MSGP. The details surrounding the findings and corrective actions can be found in Appendix 1 of this report.

6.0 Inspections "Section 4.0, 4.1.1 and 4.1.2 of the MSGP"

6.1 Routine Facility Inspection Procedures

AES-PR will conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with the effluent limits contained in this permit. Routine facility inspections will be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to stormwater. We perform these inspections during periods when the facility is in operation. AES-PR will specify the relevant inspection schedules in your SWPPP document as required in Part 5.1.5 of the MSGP. These routine inspections have been performed by a qualified person with at least one member of our stormwater pollution prevention team participating. At least once each calendar year, the routine facility inspection will be conducted during a period when a stormwater discharge is occurring.

6.2 Routine Facility Inspection Documentation

AES-PR will document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP as required in Part 5.4 of the MSGP. You are not required to submit your routine facility inspection findings to EPA, unless specifically requested to do so. At a minimum, your documentation of each routine facility inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information and a description of any discharges occurring at the time of the inspection;
- Any previously unidentified discharges of pollutants from the site;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any incidents of noncompliance observed; and
- Any additional control measures needed to comply with the permit requirements.

7.0 AES-PR 2014 Q-4 Routine Facility Inspection Inspections "Section 4.0, 4.1.1 and 4.1.2 of the MSGP"

Inspection Members and Background: The Routine Facility Inspection was performed by Hector Avila the Environmental Coordinator a member of the stormwater pollution team for AES-PR and was reviewed by Winston Esteves, PE, BCEE, QEP, CHMM, CPESC, CESSWI an independent Environmental Consultant, hired by AES-PR to assist in the site inspection, as well as provide any best practices identified in the industry to ensure that we are continuously meeting our compliance status. This requirement can be found in Section 4.1.1 and 4.1.2 of our MSGP and in the Administrative Compliance Order Docket Number CWA-02-2013-3100, Section V – 19.

This report summarizes all site findings related to the requirements identified above and it provides its recommendations to improve the program in the facility ensuring continuous compliance status.

Findings: During the Comprehensive Annual Evaluation, AES-PR had identified 3 various findings that required routine maintenance and or corrective actions, none of which were directly related to any Unauthorized Releases or direct negligence on behalf of AES-PR. In summary, the findings identified were relatively low in nature, and were corrected in a timely manner. Please note that during this period of time, AES-PR was working under an Administrative Compliance Order, and were conducting various engineering analysis with the purpose of identifying and implementing new BMP's both Structural and Non-Structural for overall improvement's to the Facility.

Corrective Actions: All of the findings in documented during the Routine Facility Inspection, were items that are being addressed in the Administrative Compliance Order Docket Number CWA-02-2013-3100, and were in the process of being implemented or scheduled to be implemented. Further details of this report can be found in Appendix 2 of this report.

8.0 Required Monitoring "Section 6.2 of the MSGP"

AES-PR's MSGP permit includes five types of required analytical monitoring, one or more of which may apply to your discharge:

- Quarterly benchmark monitoring (see Part 6.2.1)
- Annual effluent limitations guidelines monitoring (see Part 6.2.2);
- State- or Tribal-specific monitoring (see Part 6.2.3);
- Impaired waters monitoring (see Part 6.2.4); and
- Other monitoring as required by EPA (see Part 6.2.5).

When more than one type of monitoring for the same parameter at the same outfall applies (e.g., total suspended solids once per year for an effluent limit and once per quarter for benchmark monitoring at a given outfall), you may use a single sample to satisfy both monitoring requirements (i.e., one sample satisfying both the annual effluent limit sample and one of the 4 quarterly benchmark monitoring samples).
All required monitoring must be conducted in accordance with the procedures described in Appendix B, Subsection 10.D of the MSGP.

8.1 Benchmark Monitoring

Our permit stipulates pollutant benchmark concentrations that may be applicable to your discharge. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of our control measures and to assist AES-PR in knowing when additional corrective action(s) may be necessary to comply with the effluent limitations in Part 2 of the MSGP.

8.2 Benchmark Monitoring Schedule

Benchmark monitoring will be conducted quarterly, as identified in Part 6.1.7, for your first 4 full quarters of permit coverage commencing no earlier than April 1, 2009. Facilities in climates with irregular stormwater runoff, as described in Part 6.1.6 of the MSGP, may modify this quarterly schedule provided that this revised schedule is reported to EPA when the first benchmark sample is collected and reported, and that this revised schedule is kept with the facility's SWPPP as specified in Part 5.4 of the MSGP.

Data not exceeding benchmarks: After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, AES-PR would have fulfilled our monitoring requirements for that parameter for the permit term. For averaging purposes, use a value of zero for any individual sample parameter, analyzed using procedures consistent with Part 6.2.1.1 of the MSGP, which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit.

Data exceeding benchmarks: After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter exceeds the benchmark, you must, in accordance with Part 3.2, review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit, and either:

- Make the necessary modifications and continue quarterly monitoring until you have completed 4 additional quarters of monitoring for which the average does not exceed the benchmark; or
- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations in Parts 2 of this permit, in which case you must continue monitoring once per year. You must also document your rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with your SWPPP. You must also notify EPA of this determination in your next benchmark monitoring report.

In accordance with Part 3.2, you must review your control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full 4 quarters of monitoring data, if an exceedance of the 4 quarter average is mathematically certain. If after modifying your control measures and conducting 4 additional quarters of monitoring, your average still exceeds the benchmark (or if an exceedance of the benchmark by the 4 quarter average is mathematically certain prior to conducting the full 4 additional quarters of monitoring), you must again review your control measures and take one of the two actions above.

9.0 AES-PR Q-4, Quarterly Benchmark Monitoring Analysis "Section 6.2 of the MSGP"

Inspection Members and Background: The Quarterly Benchmark Monitoring Analysis was performed by Hector Avila the Environmental Coordinator a member of the stormwater pollution team for AES-PR and was reviewed by Winston Esteves, PE, BCEE, QEP, CHMM, CPESC, CESSWI an independent Environmental Consultant, hired by AES-PR to assist in the site inspection, as well as provide any best practices identified in the industry to ensure that we are continuously meeting our compliance status. This requirement can be found in Section 6.1.3, 6.1.4, 6.1.5, 6.1.7, 6.2.1.1, 6.2.1.2, 8.0.7 (Sector Specific benchmark for steam electric power generating facilities) and Part 8.Q.6 (sector-specific for water transportation) of our MSGP and in the Administrative Compliance Order Docket Number CWA-02-2013-3100, Section V – 25 & 26.

This report summarizes all site findings related to the requirements identified above and it provides its recommendations to improve the program in the facility ensuring continuous compliance status.

Findings: During Q-4 of 2014, AES-PR only conducted sampling to outfall 002 due to the fact there was not enough rainfall to produce a measurable discharge at Outfall 003A, Outfall 003B and Outfall 004. After review of the laboratory results, it was apparent that the Iron and Aluminum levels were outside of the benchmark limits, of which were not part of our Permit limits and did not justify an exceedance to any our permit limits, as well as none of which were directly related to any Unauthorized Releases or direct negligence on behalf of AES-PR. Please note that during this period of time, AES-PR was working under an Administrative Compliance Order, and were conducting various engineering analysis with the purpose of identifying and implementing new BMP's both Structural and Non-Structural for overall improvement's to the Facility.

Corrective Actions: The Aluminum and Iron limits that were outside the Benchmark limits are being addressed with the implementation of the Structural and Non-Structural BMP's that are being implemented while under the ACO. We have already noticed that the levels in these sampling points are reducing significantly and it is expected by the full implementation of all required BMP's, these measurements be in full compliance with the benchmark standards. The full details of this report can be found in Appendix 3 of this report.

10.0 AES-PR 2014 Comprehensive Annual Report Appendices